

ATLANTIC FISHERMAN

AUGUST
1949

Each Towed 490 Tons 560 Miles



Photo by Corps of Engineers, U. S. Army

ABOVE: There she goes — a 490 ton burden hauled safely with Columbian 9" Manila by Coyle Lines of New Orleans.

RIGHT: Here she is again—hauling another 490 ton section—except this time Columbian 5½" Nylon proves she can do it too!

...And Both Did An A-1 Job!

Chug, chug, chug, chug! The Coyle tugs haul 490-ton sections of the Galena Park-Pasadena, Texas Tunnel through the Intracoastal Canal. They haul with confidence, too — because these long time users of Columbian Rope know they can depend on Columbian every mile of the difficult voyage.

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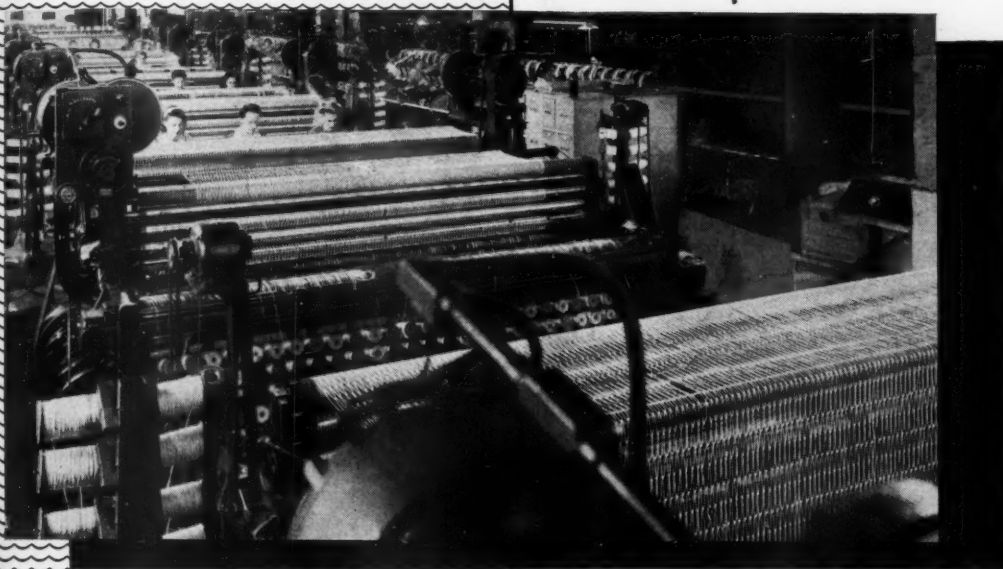
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The Wesco Cod-End Protector on the "Venture II", and below, port captain Lawrence Soule

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Among the hundreds of boats equipped with the Wesco Cod-End Protector is the 90' Boston dragger "Venture II". She is a member of the A. L. Parker fleet, of which Lawrence Soule is port captain. Skippered by Capt. James Wall, the "Venture II" already has had 8 months' service from her Wesco Protector.

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Greater By-Product Utilization Can Increase Profits

It has been predicted that the heads, tails, skins and entrails of fish some day will sell for more than food fillets because of the demand for chemical substances.

Under existing methods, an enormous wastage of potentially valuable material occurs in many fishing and processing operations. For example, it is estimated that more than 100,000,000 lbs. of waste is discarded annually by salmon canneries in Alaska.

Research is being carried out intensively to develop some practicable and feasible use. The recovery of certain chemicals useful in the food, cosmetic, and pharmaceutical industries appears most promising.

It is said that the major source of profit in the meat industry today is not in its primary market, but in its by-products.

There has been much interest shown in fishery by-products by pharmaceutical and manufacturing firms for developing new products and for use as cheaper and better raw materials for established products.

By-product processes used in Japan make possible the recovery of the high vitamin content from the eyes of codfish, the manufacture of turine from waste liquors resulting from squid canning and the production of a delectable condiment sauce from hydrolysis of scrap fish flesh.

Synthetic egg white, prepared from fish protein has been available commercially in Germany, and satisfactorily used in the baking and confectionery industries. The product is made by extracting the fat and readily soluble protein from waste flesh and then dissolving the residue in warm dilute caustic acid.

Cheese, a nutritious and popular food, is made from the proteins of milk. It is not unreasonable to suppose that an entirely new type of food, analogous to cheese might be made from the proteins of fish scrap.

Filleting of some varieties of fish produces a waste proportion as high as 80 percent. One major constituent of this waste is flesh that adheres to the head bones and fins, and which is first-class protein. While the waste now is generally converted into fish meal, it might well have more profitable possibilities.

The processing of fish stickwater to provide condensed fish solubles is increasing the profit from the fish meal and oil industry. Surveys indicate that the demand for stable solubles is expanding rapidly, and that even if all available stickwater were utilized, it might not meet the demand.

Millions of pounds of condensed fish solubles are being used by the animal feed industry to enrich high-nutritive value feeds, and no other known available material contains such growth-giving qualities.

One of the biggest opportunities for by-product utilization exists aboard fishing boats. Before the war, fish livers were saved by many groundfish draggers and trawlers. When fish prices went up and crews were making high earnings, there was little incentive to handle livers.

Now that fish prices have returned to a more normal level, the added income that would accrue from livers should be a worthwhile consideration.

Another possible source of additional revenue might come from the marketing of unused species, which are now shoveled overboard. In this connection, one has to think only of redfish, which 20 years ago was a discarded variety and which now accounts for a major portion of the New England catch. A trend in this direction is the catching of so-called trash fish by several boats which are taking them to reduction plants. However, if these fish could be popularized as new consumer products, the fishermen would command a much higher price.

The entrails from fish cleaned aboard are a total loss, despite the fact that they are of high food value. In the operation of a factory-type vessel, it is feasible to have special equipment for converting such waste to meal and oil. Possibly some economical method can be devised to process entrails on smaller boats.

Any plan to better utilize fishery resources and their by-products should have the whole-hearted support of the industry. The small amount of additional handling necessary can repay big dividends. It can make the operation of fishing boats a more profitable enterprise for both owner and crew.

ATLANTIC FISHERMAN

REGISTERED U. S. PATENT OFFICE

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On Atlantic Coast, Gulf of Mexico, Great Lakes

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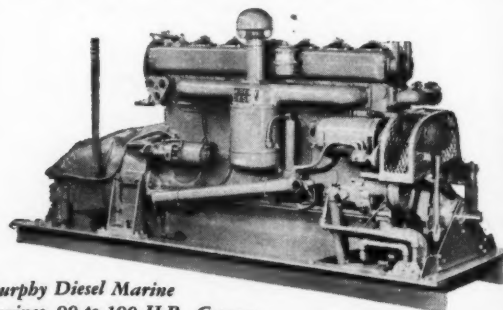
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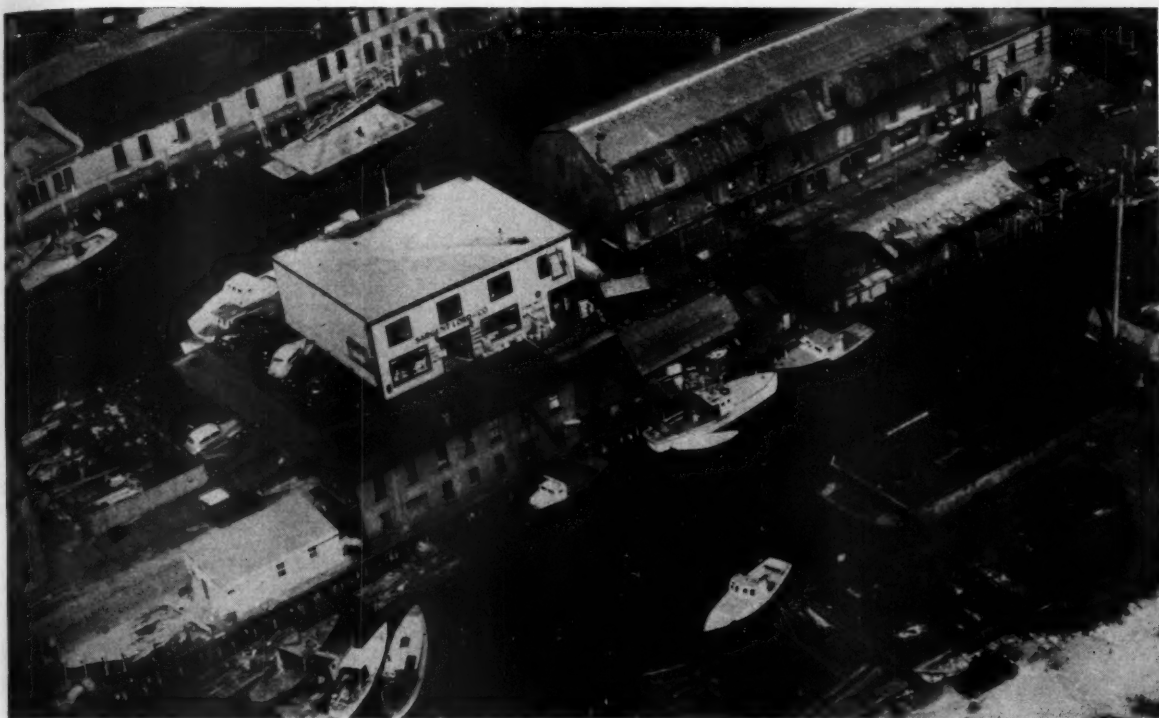
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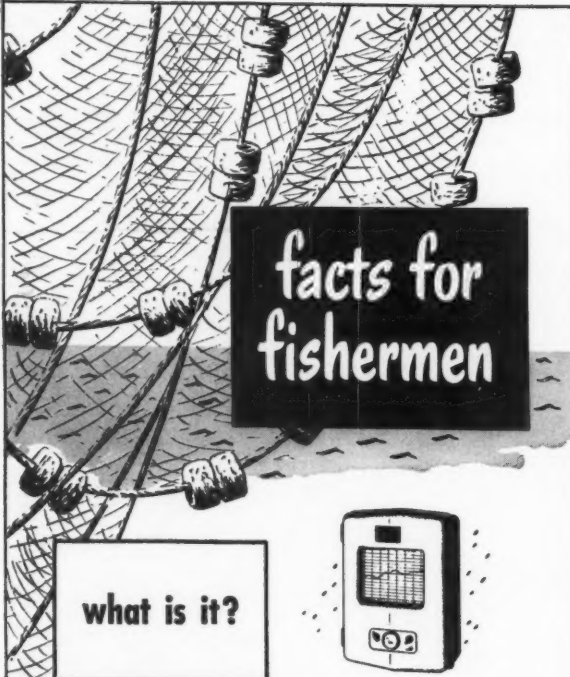
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facts for fishermen

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what good is it?

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how?

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Sounding-Lead

WAGE-HOUR BILLS—The Lucas Bill, which retained the current fishery exemption clause in the Fair Labor Standards Act, was made to order for the fishing industry until a surprise amendment was passed by the House August 10. Offered by Congressman Bates of Massachusetts, the amendment, parts of which are not at all clear, was pushed through when most representatives interested in fisheries matters were off the floor.

The amendment practically scraps the fishery exemption clause in that it appears to place processing, canning, marketing and freezing of fish in the non-exempt class. Although shellfish is not mentioned specifically, it is believed to be included in the amendment by inference. Bates' measure provides that for a period of 14 weeks only time and a half may not be paid the employee. Even then, time and a half over 56 hours must be paid.

Thus the Lucas Bill, with regards to fisheries, has become as unfavorable as the Lesinski Bill, in fact, they closely parallel one another. Even though Congressman Lesinski, chairman of the House Labor Committee, recently filed a new bill, as far as fisheries are concerned, it carries the same language as his old bill. The measure proposes a 75c per hour minimum, which may be compromised down to 65c, but is subject to revision with changes in the cost of living; allows up to 14 weeks exemption for labor engaged in fish processing; and exempts fisheries operations up to the point where processing starts.

LEGISLATION—House Resolutions authorizing a study of shad along the Atlantic Coast; expansion of facilities at the Cape Vincent, N. Y., fish cultural station; establishment of rearing ponds and a fish hatchery in the Upper Peninsula of Michigan; and investigation and eradication of sea lamprey in the Great Lakes all have been reported by a Senate committee as amendments to H.R. 2740. This resolution is for establishment of rearing ponds and a hatchery in Georgia.

The Senate Committee on Foreign Relations has approved a recommendation that the Senate ratify the Northwest Atlantic fisheries conservation treaty. H. R. 5240, which provides that controls on oils and fats imports be continued until January 1, 1951, has been signed by the President.

Funds for the *Albatross III* have been increased by the Senate Appropriations Committee to allow her to operate 8½ months this coming year.

FISH OIL PARITY—At recent hearings before both the Senate Finance Committee and the House Agriculture Committee on the establishment of average parity prices for fats and oils, considerable enthusiasm for the parities was shown by domestic producers. On the other hand, understandable opposition is being presented by the soap and importing interests.

Fish oil interests in the National Fisheries Institute have asked support for these bills. While the fishing industry, for the most part, wants to stay away from Government price supports, in this case the other fats and oils with which fish oils compete would have a much favored position if fish oils were not included in the parities.

ECA BUYING—Among the recent procurement authorizations announced by the ECA is one for \$400,000 for the purchase of canned fish from the U. S. and possessions for delivery to Ireland prior to December 31, 1949. Belgium - Luxemburg have been authorized to buy \$100,000 worth of canned fish and \$50,000 worth of fish otherwise processed. Belgium has been allotted another \$200,000 to buy U. S. canned fish with no restriction on type. ECA also has announced a decrease of \$62,000 in an authorization which was to be used to purchase whale and fish oils for delivery to Korea.

FAO HERRING TALKS—Under the auspices of Food and Agriculture Organization, a meeting will be held in The Hague, Netherlands, on August 29, to discuss ways and means of world marketing of herring products which are in surplus. U. S. attendants at the meeting will be: A. W. Anderson of Fish & Wildlife Service; Maurice

Waller, U. S. Department of Commerce; Robert Tyson of ECA; and Charles Carry of National Cannery Association.

Tyson, in addition to attending the FAO meeting, expects to visit ECA countries and Bi-Zone Germany where he will appraise their fish needs. In Paris, he will confer with Reginald Fiedler who heads up the fisheries part of ECA in the Paris office.

F&WS, INDUSTRY MEET—Representatives of the fishing industry sat in with the administrators and technologists of the Fish & Wildlife Service July 20 to discuss the projects to be undertaken this coming year. National Fisheries Institute had six representatives present including Ed Maher, General Seafoods, Boston; Ammon Dunton, Virginia Fishermen's Assoc., White Stone, Va.; H. R. Humphries, Jr., Standard Products Co., White Stone, Va.; Harold Cary, American Tunaboat Assoc., San Diego, Cal.; and members of the NFI staff. Reports were sent in by Harry Beard, chairman of the Technological Section, and Stanley Letson, chairman of the Fish Meal, Oil, and By-Products Committee.

The FWS brought in leaders from laboratories in Ketchikan, Seattle, Boston, and College Park, Md. Dr. Lewis Radcliffe represented the Oyster Institute, Charles Carry the National Cannery, and Seth Levine the CIO Longshoremen Workers.

FILLET IMPORTS—Imports of groundfish fillets (including rosefish) for the first six months in 1949 totalled 23,291,110 lbs., compared with 25,543,588 lbs. during the corresponding period in 1948.

June fillet imports amounted to 2,545,299 lbs.—a decrease of 12% compared with the previous month, and 45% less than in June, 1948. The major portion of the June imports was received from Canada. Receipts from Norway, amounting to 215,184 lbs., were the largest for any month except September, 1948, when 395,770 lbs. were received from that country.

CANADIAN PRODUCTION—During June, landings in the sea-fisheries of Canada (excluding Newfoundland) amounted to 118,579,000 lbs., only 2.8% below the total for June, 1948. However, the catch for the first half of 1949—469,403,000 lbs.—is 14% lower than that for the same period of last year, decreases having been registered thus far for almost all the major species on both coasts.

On the Atlantic Coast the total catch amounted to 107,148,000 lbs., or 0.1% below the June, 1948, landings. Nevertheless, the total is 10.3% lower than for the same six months of last year. Herring and sardines continue to show the largest decreases, clams and quahaugs, and hake the largest increases. Although the season is still fairly young, there are indications that larger quantities of Atlantic cod, pollock and hake are being salted and dried than was the case a year ago.

Exports during the first five months of 1949 decreased by some \$6.5 millions, or approximately 17%, with the greatest drop occurring in the canned fish total.

JAPAN PRODUCTION—Japan's estimated catch for this year is 6,800,000,000 lbs. of fish as contrasted with 5,700,000,000 lbs. in 1948, according to SCAP. Catches of 7,001,000,000 lbs. for 1950 and 7,108,000,000 lbs. for 1951 are forecast.

By 1950 it is believed that there will be no serious shortage of materials such as nets, twine, and rope with the expected result that production will reach the maximum which can be obtained from the present area on a sustained yield basis.

TAG STRIPED BASS—Plans have been developed over a wide territory and by different agencies looking to placing tags on a goodly number of rock or striped bass during the year ahead. Already over 200 such fish have been tagged in South Carolina. A fishery biologist has been employed to step up tagging of rock along the Atlantic Coast and to head up the study of this fish, especially its migratory habits along the Coast. It is expected that much useful information will accrue from this work such as has been the case with the rather extensive rock tagging experiments that have been conducted by the Chesapeake Biological Laboratory of Maryland and the Fish & Wildlife Service in the Chesapeake area.

Surrette

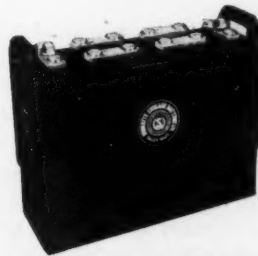
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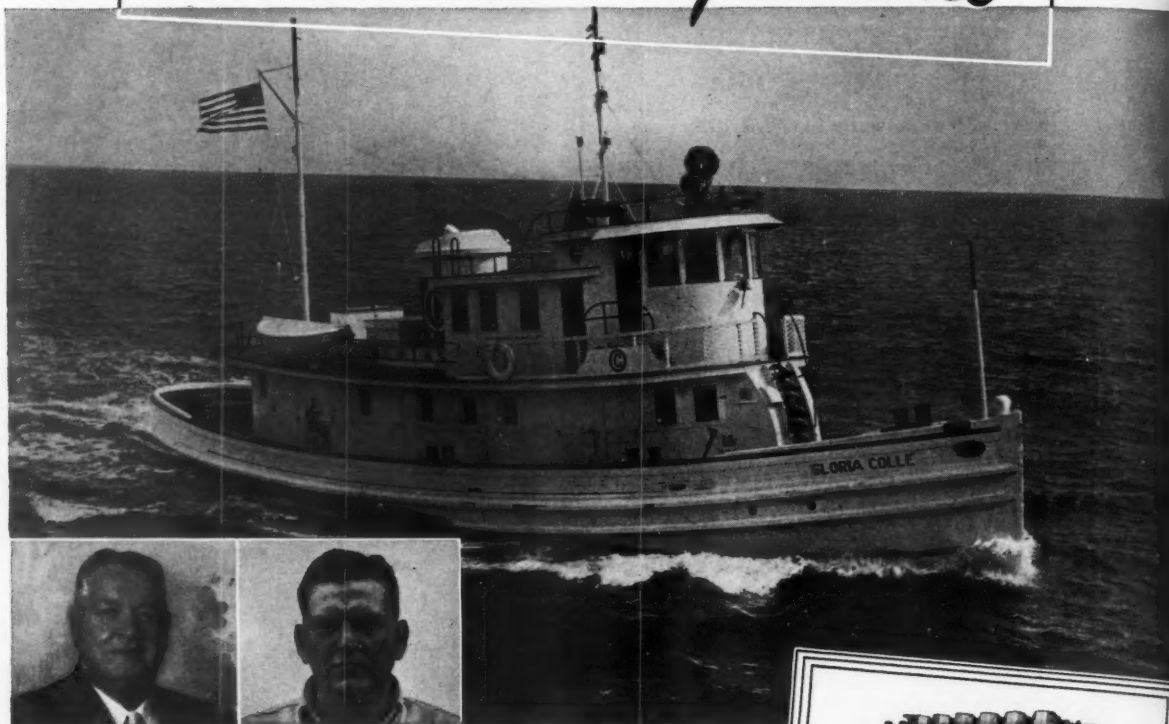
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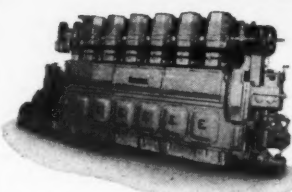
Herman H. Colle and John H. Colle, owners of the Colle Towing Company, Inc., New Orleans, have long been engaged in the operation of tugboats handling pulpwood and petroleum products in intracoastal and river service.

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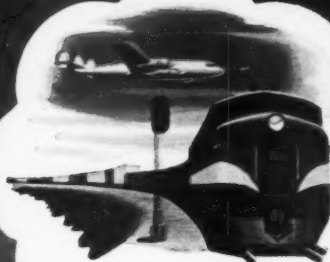
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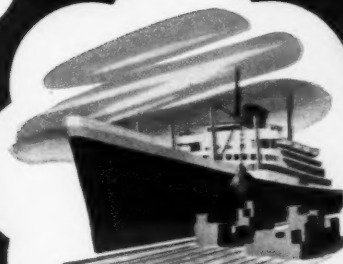
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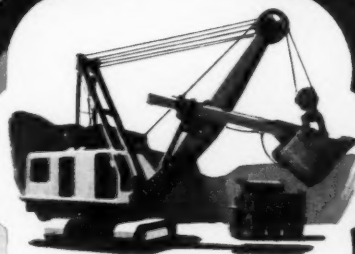
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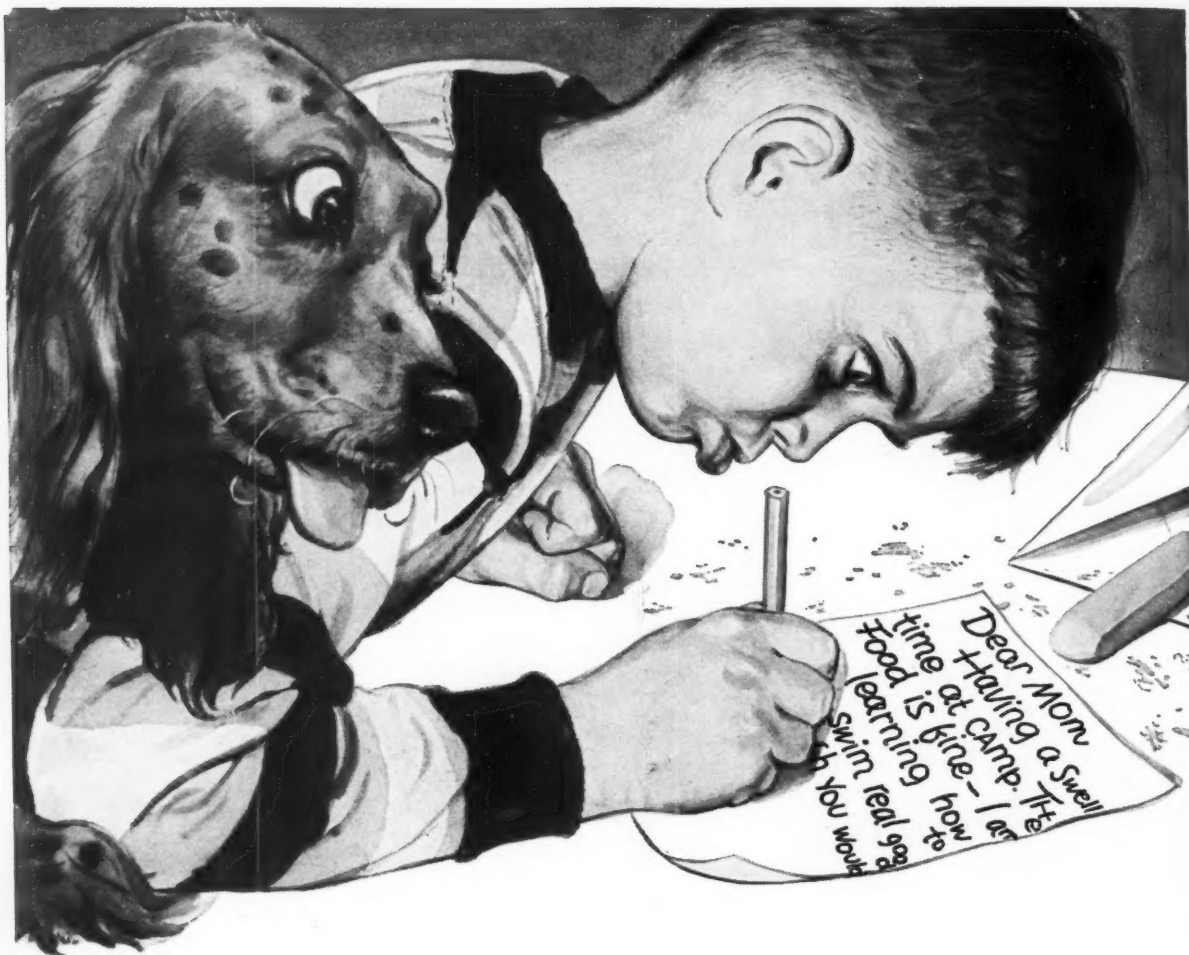


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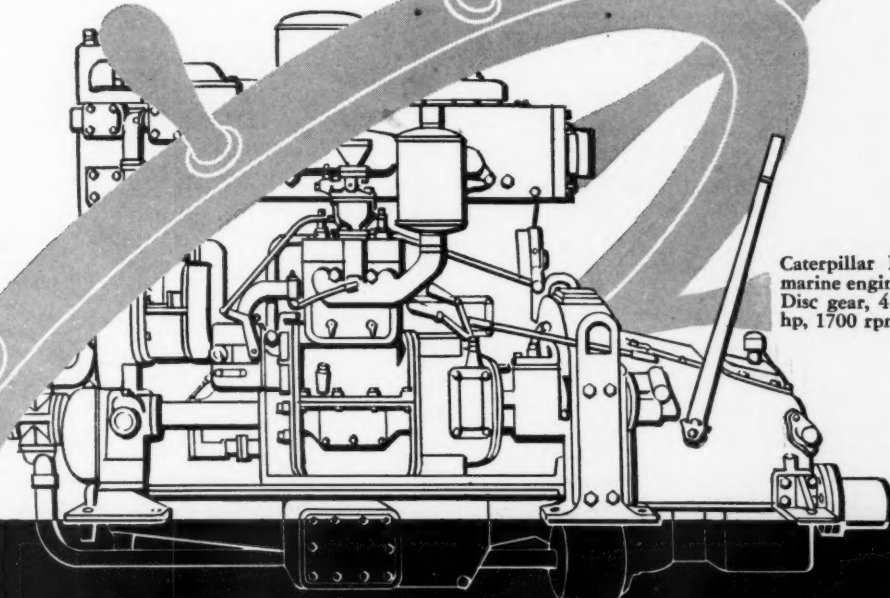
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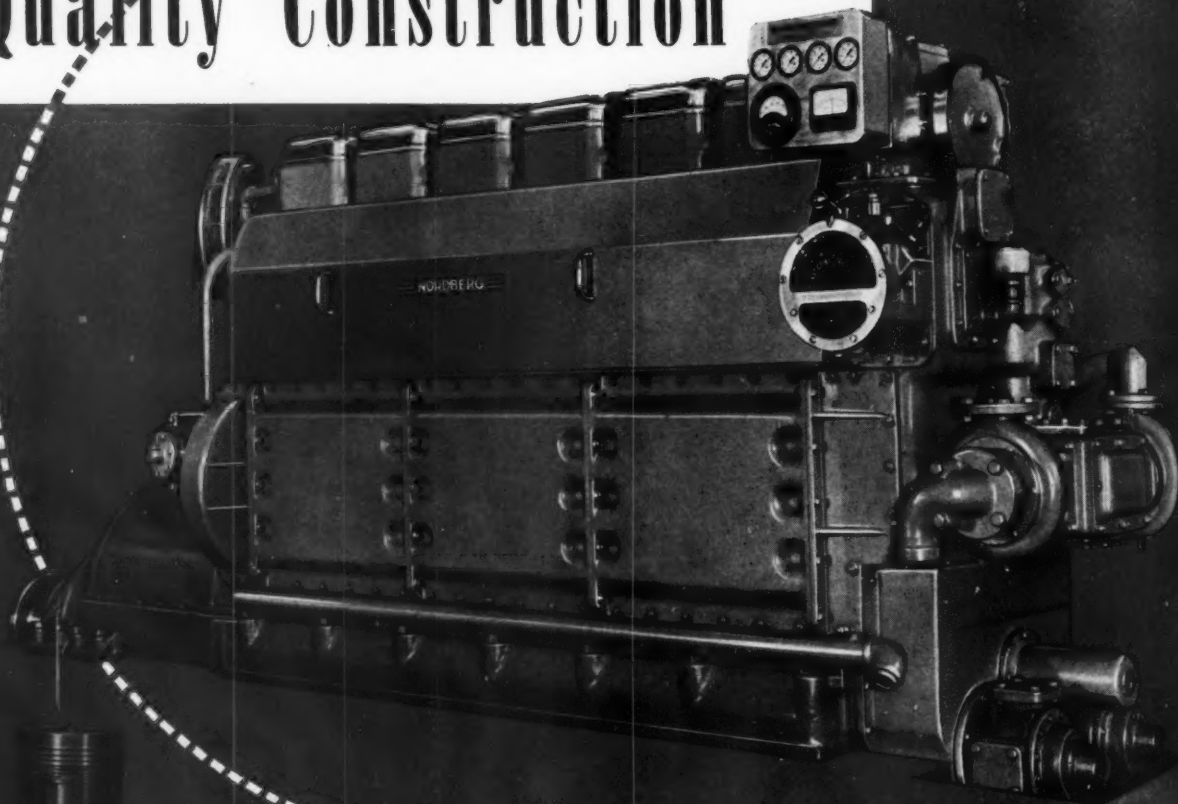


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DIESEL ENGINES



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MARINE

East Coast Clam Survey Underway

Five-Year Study Authorized by Congress*

SPONSORED by the Atlantic States Marine Fisheries Commission, a five-year investigation of soft-shell and hard-shell clams along the Atlantic Coast was authorized by Congress last year. The U. S. Fish & Wildlife Service was directed to undertake the comprehensive studies, with particular respect to biology, propagation and methods of cultivation, and to work in cooperation with appropriate state and interstate agencies.

Purpose of the investigation is to find means of arresting depletion in existing productive beds; restoring to production beds formerly productive but now barren or unusable; developing new areas which may be found suitable; improving methods and techniques of digging, transplanting, and handling; and otherwise increasing production and improving the quality of clams for the benefit of both producers and consumers.

Following a survey of the problems in each State from Maine to Florida, research units have been established in five strategic locations with an additional station planned for the coming year. Headquarters for the investigation is at Boothbay Harbor, Maine, as laboratory facilities are available there and it is about the center of the soft-shell clam producing area. The other four units are at Newburyport, Mass., Wickford, R. I., Milford, Conn., and Rutgers University in New Jersey.

Resource Management Studied in Maine

Maine has great quantities of soft-shell clams and an intense commercial fishery. The principal problem of the Maine Department of Sea and Shore Fisheries is the management of this fishery so that it shall not become depleted. In places the digging can be greatly increased, in other places it must be curtailed.

Three biologists are stationed at Boothbay Harbor at the present time and Sagadahoc Bay and Robinhood Cove on Georgetown Island have been chosen for study to develop methods for management. Buyers of clams from these areas have kept daily records of the number of bushels each man has dug for the last three years, and will continue to keep them thus enabling investigators to determine catch per unit of effort, or bushels per man tide in both areas.

Each bay will be handled as a separate management problem to determine the amount of clams which can be removed each year without depleting the stock. To determine this it must first be learned how fast the clams grow and how many clams are now present in the bay. It must be determined how many young clams are added each year by setting and how many die of natural causes, such as predators, silting, freezing, disease, or old age. Investigators have to know how many small clams are killed by the commercial digging and how many eggs are produced by clams of different ages and sizes.

Balancing all of these factors will tell the amount of clams which can be removed safely each year. This figure will be compared with the actual production from records kept by the clam



Scarboro, Me. clam warden, Roy Snow, left, and Maine Sea and Shore Fisheries shellfish specialist, Dana Wallace, preparing experimental plot for study of methods to be employed in controlling encroachment of mussels on valuable clam producing flats in Maine.

buyers. The clam population census will be taken twice each year to check the accuracy of predictions.

These studies will also enable determination of the extent of natural fluctuations in abundance which can then be compared with the changes in abundance caused by digging. These investigations are being conducted jointly by the Maine Department and the Fish & Wildlife Service as pilot plant studies of the management problem. When methods have been perfected, Maine will be able to apply these techniques to all of her coast line.

In addition to the management studies at Sagadahoc Bay and Robinhood Cove, other problems of mutual interest to the industry, the State and the Service will be investigated, such as methods of clam farming, cause of "water belly", effect of thinning stunted clams, methods of catching seed clams, best time and methods of transplanting seed, etc.

Clam Farms in Massachusetts

The story of the disappearance of the soft clam in New Hampshire and Massachusetts has received much publicity and is responsible in a large measure for the present investigation. Flats which formerly supported three hundred fifty to four hundred diggers now support thirty-five. Areas which were once productive are now barren. Sewage pollution has closed many of the best areas. The problems in Massachusetts are varied because of the different environmental conditions. Management of the fishery by closed areas and seasons and catch limits seems ineffectual where depletion has become so serious.

The Parker River Wildlife Refuge near Newburyport, Mass. has been chosen for the location of clam research in that State. Plum Island Sound was once a center of clam production and still has great potentialities. Most of this area is free from pollution and lies within the Refuge where experimental plots are easily protected.

An office has been established at Newburyport and three biologists are stationed there. Arrangements have also been made for cooperative studies with Harvard University in this area.

The Newburyport Unit will establish experimental clam farms and determine their commercial practicability. Spawning and setting of the larvae will be followed to develop methods of obtaining seed clams. Growth rates and mortality of the young clams will be determined. The effects of predators and means for their control will be studied. In addition, investigations will be made to establish the reasons for the decline in abundance of clams.

All of this work will be in close cooperation with the Woods Hole Oceanographic Institution project at Barnstable and the Shellfish Program of the Marine Fisheries Division of the Massachusetts Department of Conservation.

Woods Hole Propagation Experiments

In 1947, several residents of the town of Barnstable, Massachusetts obtained leases on a barren flat in Barnstable Harbor
(Continued on page 30)

* This article is a condensation of papers presented at the recent Oyster Convention by John B. Glud, chief, clam investigations, U. S. Fish & Wildlife Service, Woods Hole, Mass.; Harry J. Turner, Jr., Woods Hole Oceanographic Institute; and Dr. Victor L. Loosanoff, director, Fish & Wildlife Service laboratory, Milford, Conn.

How to Adjust Compasses Properly

By Egerton B. Sawtelle*

COMPASS Adjustment is a rather unfortunate name for the science and art of balancing out errors in a magnetic compass. These errors are caused by all types of iron and steel in the vicinity of a ship's compass, and they cannot be, or will not be, otherwise eliminated. Strictly speaking, the compass is not being adjusted, but the ill effects of the vessel on the compass are being balanced out as effectively as possible. This misunderstanding can be illustrated by an experience the writer had a while ago.

A fisherman appeared with a perfectly good compass under his arm and asked to have it adjusted in time for him to pick

deviation errors change, sometimes very much, with changes in geographical position. Thus, a compass will most likely have very different deviation errors in Key West, Florida, than it had in Southwest Harbor, Maine. (3) Compass card may swing so much in a sea as to be worthless.

The magnetic compass on a new vessel should be adjusted by an experienced compass adjuster before this vessel makes any runs during which it may be necessary to rely on this compass for safe navigation. It is best to put off this adjustment job as long as possible after launching. This gives more time to make sure that all changes and adjustments in hull or equipment have been made. The more trial runs that can be made before finally adjusting the compass, the better.

A vessel with an appreciable amount of iron and steel in her construction tends to pick up magnetism from the earth's magnetic field when she heads in one direction a considerable length of time; as when fixed in position on the ways of a shipyard, or as when moored to a dock for more than a few days. Unfortunately, this type of magnetism is not steady. It comes and goes according to the manner in which the vessel is handled.

After such a new vessel is launched, she should be headed in exactly the opposite direction at the outfitting dock. This will help her to "spill" the transient magnetism which she picked up while being built. For the same reason, a vessel in service, but temporarily moored to a dock, should be turned end for end at the middle of a prolonged tie-up period to prevent this old devil transient magnetism from building up appreciably. The more such vessels can be run in large circles clockwise, then counterclockwise, before attempting to adjust the compass, the better chance the resulting compass job has of "sticking."

The magnetic compass should be checked, and if necessary readjusted, whenever any changes have been made in the iron or steel contents of a vessel. This is especially true if such changes are made anywhere near the compass or if any welding is done on the vessel. While it is always safest to call in a competent compass adjuster, any skipper can tell if his compass is in reasonably good adjustment as follows: (1) Run what is known to be an accurate magnetic course either north or south. (2) Repeat this on either an east or west course. (3) Repeat this on any one of four courses—northeast, southwest, northwest or southeast.

These are the "control" points for the standard type of compass adjusting and any usual compass that checks within less than $1\frac{1}{2}^\circ$ ($\frac{1}{2}$ point) by following the above procedure should be reasonably reliable for ordinary use. To be sure, the compass may not "reverse" exactly and some intercardinal points may have more errors than others. Balancing out such errors and making up a card of residual deviations is a job for the experienced compass adjuster. Such a job takes time, continuous experience, knowledge of fundamentals, knowledge of the particular vessel and a darn good helmsman. It's not much of a job to get 75% of the errors out of a compass. It is getting the remaining errors cut to a minimum that often makes a fellow really sweat.

Why and When Adjustment Is Necessary

The main reasons why a magnetic compass should be adjusted may be shown by comparing behavior between typical adjusted and unadjusted compasses.

Adjusted Compasses: (1) Bothersome and confusing compass errors are cut to a minimum. Those remaining, if any, are easy to apply. (2) Compass remains reasonably accurate regardless of changes in geographical position. Thus, a compass in complete adjustment in Southwest Harbor, Maine, will still be in adjustment in Key West, Florida. (3) Compass card remains reasonably steady in a sea.

Unadjusted Compasses: (1) Large compass errors which are often impossible to apply with any degree of accuracy. Compass may be practically worthless on certain headings. (2) Compass

* Compass Adjuster—Freeport, Maine. This is the second of a series of articles on compasses.

Why Compasses "Go Out"

Some vessels are particularly cranky and won't stay in adjustment for more than a matter of days, while others almost never "go out". The former are usually those vessels that are not correctly built with an eye to eliminating the causes of compass error, especially the causes of that abhorrent transient magnetism. As the name implies, transient magnetism produces compass errors that come and go. The compass adjuster cannot cope with this type of error, no matter how great his scientific knowledge and the time and effort he may expend to get a good job.

Let's consider one possible example of this pest, an exhaust pipe running close to the compass. If the vessel has been moored to a dock for several days, this exhaust pipe has been subjected to the influence of a constant magnetic field of the

(Continued on page 28)

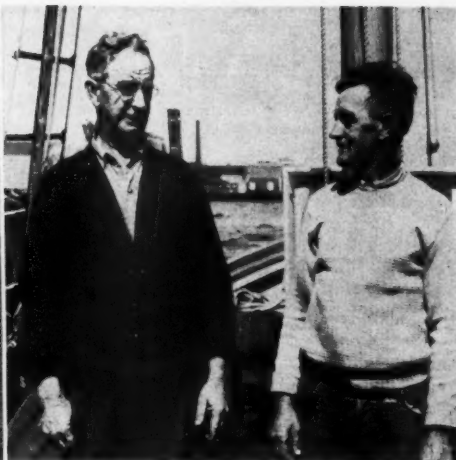
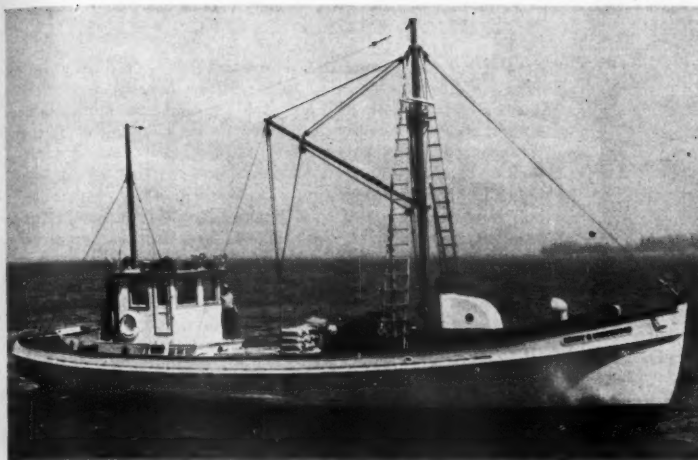


Fig. 4—Magnetic compass correctors.

it up the next day. It took some explaining to put across the point that the compass itself was satisfactory and that what had to be done, actually, was to adjust his particular boat so that there would be a minimum of "error producing effect" exerted on his compass.

Compass adjusting is something that every skipper should attend to, either himself or by calling in a competent compass adjuster. It is rather exacting work requiring more practical experience, on top of a good foundation in theory, than many of the so-called sciences. It is important to have the vessel trimmed in such a way that she can be made to hold a reasonably straight and accurate course. The best helmsman available is sometimes none too good to permit adjustment of the compass expeditiously. It usually takes from two to three hours to adjust the compass on the average sized dragger.

Contrary to usual opinion and the usual fee charged, it is often much more difficult to get a good compass adjustment on a small boat. For really accurate work, both the compass and the vessel must be steadied down on the required course. Under normal conditions, this often takes more than a minute. Under adverse conditions of sea and poor steering, it may take several minutes and a great deal of patience.



The new 70' sardine carrier "Henry O. Underwood", owned by William Underwood Co., Jonesport, Me., and her skipper, Capt. Lewis F. Beal, left, and engineer Burton Reed.

New Underwood Sardine Carrier Well-Fitted

AN outstanding addition to the Maine sardine fleet is the *Henry O. Underwood*, owned by William Underwood Co. of Jonesport, Maine, and commanded by Capt. Lewis F. Beal with Burton Reed as engineer.

Designed by Eldredge-McInnis, Inc. of Boston, and built by General Seafoods Shipyard, Rockland, Me., the new vessel started operating early this Summer. She has exceptionally good lines, which give her what might be called the "new look" in sardine carriers. The stern is of modified transom type, with double ended design on the underbody, and round and wide at the rail.

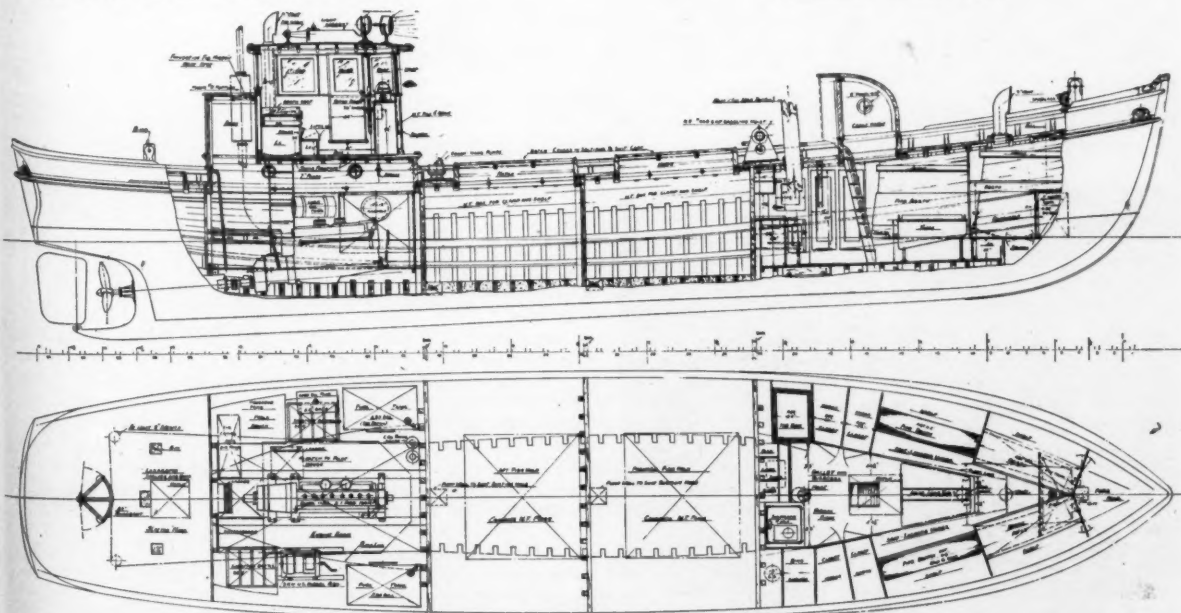
The vessel is constructed of 3-1/8" x 3-1/8" bent oak frames on close centers, 2" yellow pine planking and 2-1/4" fir decking. The fish tanks, with a total capacity of 1260 bushels or 72 hogsheds of herring, are built as an integral part of the hull. This arrangement is said to keep the fish in better condition by getting them closer to the sea water. Located amidships, the tanks have concrete floors with pump wells, and there is a watertight box around the clamp and shelf.

Dimensions of the new craft show an overall length of 70' 9", waterline of 64' 4", beam of 15' 6-1/2" and mean draft of 6' 6-1/4". Displacement is 46 long tons. She carries a jib and loose footed mainsail for steadying.

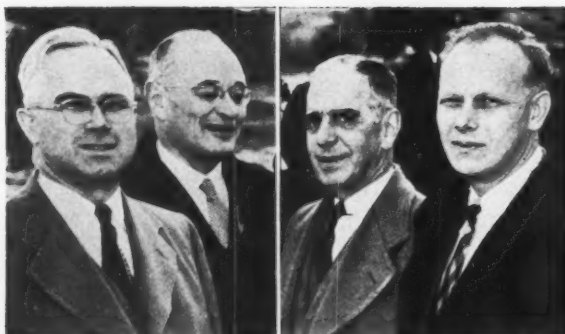
Reports indicate that the *Underwood* is a fast boat and handles well. Her cruising speed is 10 knots and maximum speed is 12. Power is furnished by a Model 1125, 8DCMR Buda Diesel, rated 160 hp. at 1400 rpm. The engine is fresh-water cooled and equipped with Snow-Nabstedt 3:1 reduction gear and pilot house controls. It swings a 46 x 34 Columbian propeller on a 3" bronze shaft with Hathaway flax-packed stern bearing. Esso lubricating oil is used.

The boat has a well-equipped electrical system comprising a U. S. Motors 3 kw. Diesel generating plant, two sets of 32-volt, HHG-21 Surrette batteries and a Navy standard dead-front switch board. The batteries are used for main engine starting as well as for power and lights. They are connected so that either set can be used for either type of service, and there is

(Continued on next page)



Inboard profile and arrangement plans of 70' sardine carrier "Henry O. Underwood", designed by Eldredge-McInnis, Inc.



Left to right, Vernon P. McFadden, superintendent of the William Underwood Co., Jonesport, Me. plant; Wm. J. Underwood and Harry C. Wells, in charge of the Underwood sales department; and Carl Jensen, superintendent of General Seafoods Shipyard, Rockland.

a cut-out switch in the pilot house for the battery line.

The fo'c's'le, entered through a dog house, is conveniently arranged and contains 2 solid berths and 2 pipe berths. There is ample locker space, and a Shipmate galley range.

There is a Gardner-Denver automatic air compressor system for operating the horn and for supplying cleaning air to the engineer. A Marine Products pump, belt driven by the engine, is used for after bilge and fish hold, while two Edson standby hand pumps are located on deck. A Blackmer hand pump is furnished for forward bilge, thus allowing a watertight bulkhead between the fo'c's'le and hold.

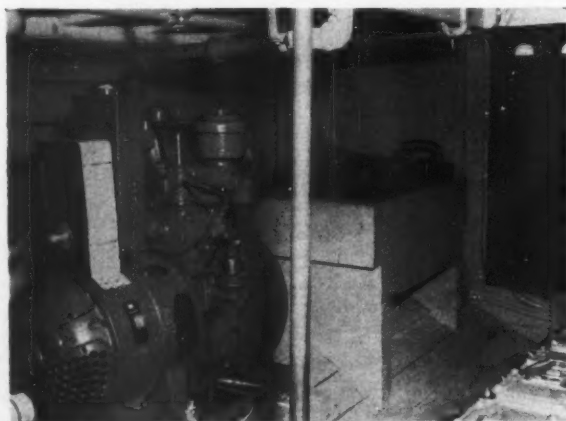
Ample visibility on all sides is provided from the pilothouse, which has a seat berth thwartships aft and a hatchway to the engine room. The vessel has Edson reduction-gear steering with cable leads, a Kelvin-White 7" Constellation compass, and 75-watt Jefferson-Travis radiotelephone. She also has a Submarine Signal Co. Model 1373 Fathometer Jr. Recorder, sold by Sargent, Lord & Co.

Deck equipment includes a 5 hp. self-contained New England hoist, powered with an air-cooled gasoline engine, an Elisha Webb 500' capacity hand windlass, two Danforth anchors, One-Mile-Ray searchlight and Crouse-Hinds flood lights.

The Underwood Company operates two plants for seafood products. Their Jonesport plant, of which Vernon P. McFadden is superintendent and Richard Davis, assistant, employs 150 workers including 80 packers. The McKinley plant, supervised by V. H. Latty, has 80 employees, including 52 packers.

Other boats operated by Underwood are the 72' *Fish Hawk*, 61' *Roma* and 70' *William Underwood*, all carriers; and the 52' *Alice* and 49' *Moosabec*, both seiners.

Headquarters of the Underwood Company are located at Watertown, Mass. Charles Stetson is president, Francis A. Harding, treasurer, and W. J. Durante, production manager.



The U. S. Motors generating plant and Surrrette batteries aboard the "Henry O. Underwood".

Fishing Films Prove Valuable

Like other industries, the American fishing industry is fast building a fine film library, that will, eventually, cover every phase of commercial fishing, packing, and marketing. More than twenty-five such motion pictures are available today, and it is expected that several others will be ready for distribution before the end of the year.

One of the most interesting of the recent motion pictures on commercial fishing is "Basic Net Mending," a two-reel film in full color, produced by Sun Dial Films, Inc., in cooperation with the Fish and Wildlife Service of the U. S. Department of Interior. This production and many others may be borrowed for showings without charge.

Every step in net mending is shown so clearly that the processes will be clearly understood by any novice; yet the picture is so thorough that many a professional will get many important, useful pointers from it.

"Basic Net Mending" illustrates at least one advantage of the motion picture for training purposes, for it takes full advantage of the camera's ability to enlarge an object to many times its normal size. Looking at knots and needles on the screen, in this picture, produces the same effect as looking at the same things through powerful magnifying glasses.

The voice commentary that accompanies the picture follows and explains every piece of action. The language, generally, is simple enough to be quite clear to the layman, but the fisherman will find himself right at home with such salty words as "three-legger," "S-hook," "sider," "hitch," and "pick-up knot."

"Basic Net Mending" is intended primarily for the commercial fisherman, as are most of the fishing pictures that have been made to date. However, there are some several films on fishing that are planned for showings to the general public. Among the most recent of these is "It's The Maine Sardine," produced for the Maine Sardine Packers Association by Sun Dial Films, Inc.

Oyster Institute Information Bureau Announced

The formation of an Information Bureau for the Oyster Institute of North America has been announced by Royal Toner of Lester & Toner, New York, N. Y., who is chairman of the Institute's Public Relations Committee. The Committee has selected A. E. Kessler, formerly executive secretary of the Fishery Council, New York, and now head of his own public relations firm, to conduct the Information Bureau. His office at 20 East 35th St., N.Y.C., will be used for this purpose.

Recipes and cook books will be made available to the public, and information on the taste and health merits of oysters will be provided. Interesting material concerning the oyster industry will be issued. Also, arrangements will be facilitated for those who wish to know more about oysters and the oyster industry.

Members of the Public Relations Committee of the Institute, which was established to work with Mr. Kessler, include Frank M. Miles, J. H. Miles & Co., Norfolk, Va.; Norman L. Jeffries, Sr., Norman L. Jeffries & Son Co., Port Norris, N. J.; Otto J. Alletag, Warren Oyster Co., Inc., Warren, R. I.; and William M. McClain, Wm. M. McClain, Inc., Philadelphia, Pa.

Legislative Committee Appointed

At a meeting of the Institute's directors at Old Point on June 6, a motion was adopted authorizing President J. S. Darling of J. S. Darling & Son, Hampton, Va., to appoint a Legislative Committee to consider and determine Institute policy on legislative matters. The duties of this Committee will be to cooperate with other groups having a common interest in particular legislative matters, to determine the policy to be adopted, to prepare briefs and make appearances before committees of Congress or hearings called by executive branches of Government.

Members of this Committee now have been appointed by President Darling, and are as follows: Norman L. Jeffries, Sr., chairman; Otto J. Alletag; John L. Plock, Shelter Island Oyster Co., Greenport, N. Y.; George T. Harrison, Tilghman Packing Co., Tilghman, Md.; Lawson Miles, J. H. Miles & Co., Norfolk, Va.; and John Mavar, Jr., Mavar Fish & Oyster Co., Biloxi, Miss.

"Albatross III" Makes Demonstration Cruises

Georges Bank and North Carolina Research Activities Described

FOLLOWING a demonstration cruise from Morehead City, N. C. in June, the 179' *Albatross III*, research vessel of the Fish & Wildlife Service, made a similar cruise from Boston, Mass., on July 21. The purpose of the cruises was to acquaint members of the fishing industry and conservation officials with the vessel, its methods, and the program of research used in fishery investigations.

On the trip from Boston, a lowering was made with the bathythermograph to show how temperatures are obtained and how the data are processed. A Nansen water bottle was lowered to demonstrate how water samples for chemical analysis are obtained from the depths. A small plankton net was towed to show how the small, almost microscopic, plants and animals of the sea are caught. The sample was displayed under a microscope and showed numbers of copepods. The 1½" Iceland trawl net with a large-mesh cod end and a fine-mesh cover was set and towed for one-half hour. Several haddock and cod were caught by the fine-mesh cover, showing that they passed through the large meshes of the cod end. Flounders and a skate were retained by the cod-end meshes.

Discussion groups were carried on throughout the cruise, during which the research of the vessel and its equipment were explained in detail.

The Morehead City demonstration cruise, arranged by W. A. Ellison, Jr., director of the Institute of Fisheries Research of the University of North Carolina, showed industry members of that section what the *Albatross III* is accomplishing. Dr. Wm. F. Royce, chief Fish & Wildlife Service scientist on the vessel's staff, demonstrated the scientific equipment and explained the investigations being conducted off the North Carolina Coast in cooperation with Institute of Fisheries Research and the Woods Hole Oceanographic Institute.

Distant North Carolina Grounds Explored

The 30-day North Carolina survey by the *Albatross III* was completed in June. This study was made to find out whether the coast-hugging fishermen were missing good catches by not venturing on out into deeper waters. For over 300 years, fishermen off the North Carolina Coast have been harvesting fish in an area stretching from the surf to the 30-fathom curve.

Equipped like a laboratory, and manned by both deep-sea sailors and deep-thinking scientists, the *Albatross III* explored down to 900 fathoms.

The Research Institute hopes to determine whether there is, beyond the present experience and operations of commercial fishermen, an area in which valuable marine life is living and dying without contributing food to mankind. If final findings



Aboard the U. S. Fish & Wildlife Service research vessel "Albatross III", Arthur Miller of Woods Hole Oceanographic Institute prepares to put a Spilhaus-Miller sea sampler over the side. This device, of which Miller was co-inventor, simultaneously records water temperature and depth.

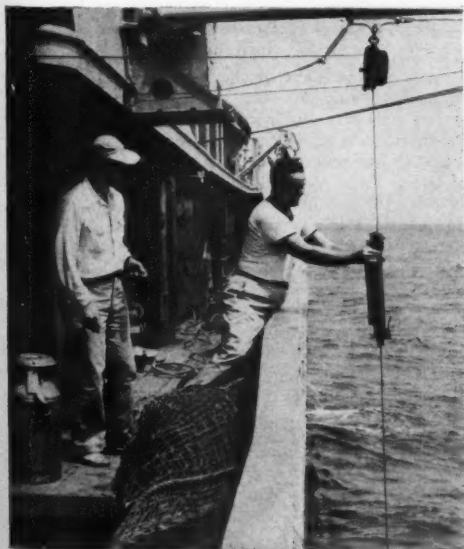
of the exploration yield positive results, North Carolina, which already is a leading fish producing State, might greatly increase its catch.

The explorations were not designed to get much in the way of fish samples, because June is not a commercial fishing time. It is proposed that a real sampling expedition be made in the Fall, when commercial fishermen are doing their work closer inshore. However, the research vessel studied water temperature, salinity, currents, plankton content, and other factors which govern the choice of habitat by sea creatures.

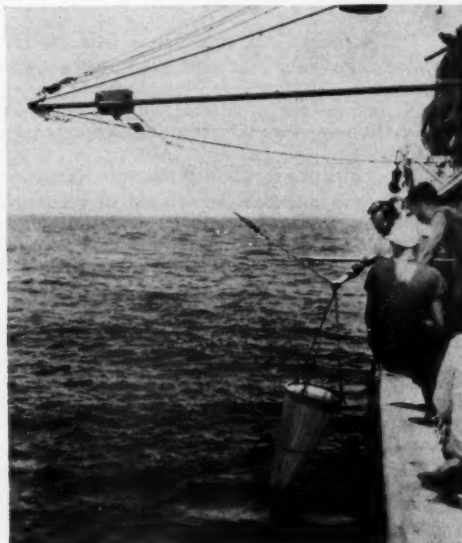
The June expedition established the fact that conditions in offshore waters are favorable as a habitat for fish. The *Albatross III* also trawled, with its big net, all the way from Charleston, S. C. to Cape Lookout, N. C., along the 40-fathom curve, without damage to its gear. The success of this tow indicates either that there are no obstructions, or that the wooden rollers on the net are effective for riding over such snags as exist.

Commercial fishermen watched with interest the experiments, the results of which may confirm their ancient routine, or

(Continued on page 47)



Left, on the "Albatross III", a Nansen water bottle is sent down by Carl Haynes of the Woods Hole Institute to collect samples of water and measure temperature at a given depth. Right, a fine-mesh plankton net is hauled aboard. This net is dropped to the bottom, then hauled up quickly, catching microscopic sea life upon which fish feed.





The 65' shrimp trawler "Crimson Tide" owned by Manuel V. Vaz of Freeport, Tex. and skippered by Capt. Clifford Horn. She is equipped with a 165 hp. General Motors Diesel, 4.65:1 Twin Disc reduction gear, 32-volt Surrette batteries, 42 x 32 Columbian propeller, and Ederer nets.

Texas Shark Fishing Tests Prove Successful

The experimental shark fishery recently instituted by the Texas Game, Fish and Oyster Commission in cooperation with Shark Industries of the Borden Company has proved quite successful according to J. L. Baughman of the Rockport Marine Laboratory.

C. A. Porter of the Borden Company made experimental sets off Port Aransas and Port Isabel with the laboratory boat *K. T.*, and found that there are sufficient sharks in the area to make fishing profitable both as a part-time and full-time business.

One of the laboratory boat crews has been trained in the proper procedure of shark fishing and will be used for purposes of instructing fishermen desirous of learning the method of handling the livers and fish.

Laguna Madre Net Law

The law regulating the size of fish seines in Laguna Madre in Cameron County is now in effect. The bill requires the use of a gill net having a mesh of not less than 2 1/2" between knots, a minnow seine of not more than 20' in length, and a bait shrimp trawl of not over 12' in width and equipped with trawl boards of not more than 14" in width and 24" in length.

J. L. Baughman, of the Texas Game, Fish and Oyster Commission, has approved the construction of a fish pass from the Gulf to Laguna Madre, north of the jetties at Brazos Santiagos. He recommended that it be dug to a depth of 3' below mean low tide.

Shrimp Boat Explosion Injuries Fatal

The explosion of the 36' shrimp boat *Little Gypsy*, owned by Ralph Patrona of Matagorda, Tex., took the life of Baines Luddington in the Gulf of Mexico July 13. Luddington and his brother, Sammy, were 12 miles out when the boat exploded and sank.

Trout, Redfish Research Resumed

The Copano Research Foundation, in cooperation with the Texas Game, Fish and Oyster Commission, will carry on the investigation of trout and red fish in the bay area. This investigation was started by Pearson of the Fish & Wildlife Service several years ago. Biologist Dewey Miles will take over the work in September with headquarters in Rockport.

Shrimp Production Drops

Commercial shrimping along the Texas Coast during July reached an all-time low for production. Bay shrimping ended July 15 with the closing of inland waters, and unsatisfactory weather conditions and scarcity of shrimp curtailed operations in the Gulf of Mexico. Some of the larger craft continue to make six and seven-day trips, but landings are small.

Two 42' Corpus Christi shrimp trawlers, *Miss Lula*, owned and operated by Capt. Johnny Rodriguez, and *Victory*, a Herndon boat skippered by Capt. Jessie Elizondo, tied up August 1

Virginia to Investigate Scarcity of Croakers

Officials of the U. S. Fish and Wildlife Service said July 22, after a conference with Virginia fishermen, that they planned inshore and off-shore surveys to determine, if possible, the cause of the drastic reduction in croakers in Virginia waters this season.

A meeting of the Virginia Fisheries Association, of which V. L. Hodges is secretary, was to be held August 18 at Old Point Comfort to discuss ways of initiating investigations to determine the cause of the scarcity of croakers and other migrating species in this area. Among the possible causes in the diminution in supply are unseasonable water temperatures which may have driven the species to other areas. For example, menhaden are reported to be abundant on the Maine Coast, and herring scarce. Unverified reports claim that the Gulf Stream is much closer to shore than normally off the Carolinas. It is suggested that water temperatures in inshore areas be correlated to determine whether any unusual conditions obtain.

Hampton Will Hold Seafood Festival

Hampton will be host to the Second Annual National Seafood Festival to be held September 16 and 17.

September 16 will mark the opening of the Seafood Exhibits at Hampton Armory. Unique on the Festival program will be an outdoor public seafood feast to be held at Darling Memorial Stadium September 17 preceding the parade, which will present a seafood theme. Seafood plants in Hampton and vicinity will be open for tours during the forenoons.

Protest Bombing Range

Led by Ammon G. Dunton, attorney for the Virginia Fishermen's Association, which is a group of menhaden producers, the fishing interests of Virginia are opposing the establishment of an aerial bombing and rocket range near Ship Shoal Island in the Atlantic Ocean. The proposed site of the range would be in the midst of the most important menhaden fishery in Virginia, and likewise is the approach of the Chesapeake Bay. It is believed that all fish entering the Bay would be affected by the range.

Besides the protest of the Virginia Fishermen's Association, similar protests have been sent to the District Engineer by N.F.I. and Congressman S. O. Bland.

Sol Fass of the Virginia Fisheries Association stated he felt that the scarcity of fish in the Bay area for the past few years has been caused by such bombings.

Oversupply of Tangier Peelers

There is an oversupply of peeler crabs. All seven of Tangier's crab houses had filled their floats to capacity the last week in July and were asking their crabbers to lay in for a few days to give the crabs time to shed off and thus make room for more crabs. According to reports, the crab packers were buying at the end of July about 90,000 peelers a day at 3c apiece.

Isaac T. Ballard

Isaac T. Ballard, 65, president of the Ballard Fish and Oyster Co., Norfolk, died on July 14. Mr. Ballard was a progressive leader of fisheries activities in his area, and had long been one of the largest distributors of seafoods in that section. He had been in the seafood business most of his life.

A native of Oriole, Md., Mr. Ballard came to Norfolk in 1910, entering the services of the J. T. White Oyster Co. Eight years later he and his five brothers purchased the Company, soon after forming the Ballard Fish and Oyster Co., but kept the J. T. White Co. until last year when the two corporations were merged. He was also president of the Atlanta Fish Co. of Atlanta, Ga.

He was a director of the Oyster Growers and Dealers Association, and a member of the advisory board of the Virginia Fisheries Laboratory.

with 2,300 lbs. of Brazilian shrimp aboard. *Miss Lula* got 1,500 lbs. of the big Gulf shrimp and the *Victory* snared 800 lbs. from the Gulf in two nights and one day.

The *Southern Pride*, also Herndon's boat, arrived in its home port with 5,100 lbs. of shrimp. Capt. O. J. Terrebone brought the boat from Brownsville on a five-day shrimping trip.

Gulf Fisheries Commission Officially Organized

Organization of the Gulf States Marine Fisheries Commission, which will carry out a newly reached agreement for joint development of seafood resources, was effected July 16 aboard the Alabama State yacht *Dixie*. A meeting of representatives of Texas, Louisiana, Mississippi, Alabama and Florida was held soon after Gov. James E. Folsom of Alabama signed the Gulf States Fishing Compact into life. Other governors were unable to attend. Commissioner Bert Thomas of the Alabama Wildlife and Fisheries Department was named chairman of the Gulf group while Harold D. Dodgen, commissioner of the Texas Game, Fish and Oyster Commission was made vice chairman.

Albert M. Day, director of the U. S. Fish & Wildlife Service, who was present for the ceremony, urged the Commission members to make an adequate fishery research program their first objective. He said that the Service will send the trawlers *Alaska* and *Oregon*, one for research and one for exploration, into the Gulf to aid the program next year. The vessels were acquired for use in the Gulf when the President signed a bill July 13 transferring them from the RFC.

Warning that good fishery research programs are expensive, Day said, "By pooling funds, facilities, personnel and other resources under cooperative arrangements, bigger and more adequate research programs can be conducted than by proceeding independently and unilaterally." The federal official said one of the first steps resulting from the compact probably would be an attempt to standardize fishery regulations of the five Gulf States.

Imports From Mexico Up

Imports of shrimp continued to increase in July. With the closed seasons in effect in Gulf States, most of the domestic supply of fresh shrimp was coming from Mexican waters. The *El Mexicano* arrived in Morgan City, La. from Carmen, Mexico, July 3 with 220,000 lbs. of frozen shrimp.

Figures for the first five months of the year showed imports at 12,955,000 lbs. compared with 9,964,000 lbs. during the similar period in 1948.

Alabama Shrimp Season Opens

Open season for shrimping in Alabama's coastal waters began August 8. This date was fixed in conformity with seasons in Louisiana and Mississippi. Shrimping will be permitted for an indefinite period, depending on size of shrimp being taken.

Two-Mile Limit for Menhaden Boats

Two-mile limit stakes, warning menhaden boats against operation within that distance of shore, have been placed along points in the Mississippi Sound, according to Frank Gazzo, deputy sea food inspector. Mr. Gazzo said this action was taken on instructions from the chief sea food inspector for that area, Meco Filipich, Biloxi.

Large Biloxi Fleet Starts Shrimping

Some 1600 fishermen manning about 1000 boats are working for the 20 seafood factories in Biloxi, Miss. during the current shrimping season which opened August 8. The season began following the traditional blessing of the fleet August 7, during which more than 100 boats were blessed. At Pass Christian, ceremonies also were held on the same day with about 60 boats participating.

The outlook for the year according to some officials appears good, even better than last year. It is noted that this year 2511

bbls. were packed during July compared with none during that month a year ago. One new field has been opened up for the fishermen, Brazilian shrimp are being caught by night trawling in international waters.

Leckich and Fayard have two new 65' x 18' shrimp boats, powered by 165 hp. General Motors engines, and DeJean Packing Co. and Wentzell Bros. have added several new boats to the fleet.

Launch 65' Oyster Dredger "J. V. Franks"

The 65' x 17' oyster dredger, *J. V. Franks*, was launched at the A. W. Covacevich Shipyards in Biloxi the week end of July 16. The boat was built for S. Z. Franks of New Orleans at a cost of \$32,000.

Powered by a 100 hp. Caterpillar Diesel, the dredger has accommodations for four men and draws only 3½' of water.

Louisiana Shrimp Fleets Blessed

Approximately 500 Terrebonne Parish shrimp boats and their crews received the blessing of the Catholic Church in annual ceremonies preceding the August 8 opening of the Louisiana shrimp season. The rites were conducted at Little Caillou, Grand Caillou and Montegut.



Shrimp trawlers tied up at Morgan City, La.

Trawl boats from three communities in lower St. Bernard Parish, Yscloskey, Shell Beach and Hopedale, also were blessed on August 6 as part of all-day ceremonies at Yscloskey. Other blessings were held at Westwego and Golden Meadow.

Oyster Reservation Opened to Tonging

The Louisiana seed oyster reservation in Sister Lake and West Bay Junop in Terrebonne Parish was opened for hand tonging of oysters June 20, and will remain open until further notice.

Oysters may be taken only from the water bottoms and natural reefs and not from that portion of Sister Lake in which shells were bedded by the Department of Wild Life and Fisheries Oyster Division in the 1948-49 planting season. Boats must report the amount of oysters removed daily.

Shrimp Festival Planned

The Louisiana Shrimp Festival and Fair Assoc., Inc., is planning a big three-day seafood festival September 16-18 at Morgan City. Indications are that it will be bigger and better than last year's with marine equipment exhibits, parades, boat races, carnival entertainment, sports and fireworks.

40 Shrimp Boats Repaired

Forty shrimping luggers were in the port of Delcambre, La. July 19 undergoing repairs during the slack season. Because of bad weather conditions, shrimp were not plentiful and few boats were making trips into the Gulf at that time.

Massachusetts Starts Survey Of Shellfish Beds

A shellfish survey to chart the beds of sea clams, scallops and quahogs was started early in August by State conservation officers aboard the 40-foot dragger *Asterias*.

The vessel is equipped with dredges, an electronic shell-fish locator and other scientific instruments which will be used on the expedition along the entire Massachusetts Coast. The results of the survey will be published in chart form, which is expected to increase the catch of commercial shellfish as new beds are discovered.

State Director Francis G. Sargent of the Marine Fisheries Division explained that his staff will conduct the survey in cooperation with the Woods Hole Oceanographic Institute. Charles L. Wheeler, State shellfish biologist, will be in charge of the survey, working in cooperation with Harry Turner of the Woods Hole Institute staff.

Newburyport Clam Investigation Underway

In Newburyport a federal office has been set up under Dr. Osgood Smith, marine biologist. With his assistants, John Baptist and Edward Chin, he has been planting experimental plots 10 feet by 20 feet with seed clams.

"We set out these plots right in the regular flats," he revealed, "and plant the seed clams for observation. One problem was to find why the seed clams don't take hold and reproduce. We got one answer mighty quick—the horseshoe crab. 'The clam flats may not be bothered with this natural predator for a long, indefinite period,' he went on, "and then, one particular day, the incoming tide brings a swarm of horseshoe crabs. 'In one day, they have wiped out my experimental plots, eating every clam in the measured area. We have not yet determined what effect these crabs might have on a natural and well-populated clam flat. We do know, however, that as many as seven big crabs were picked up in a 10 by 20-foot plot.'"

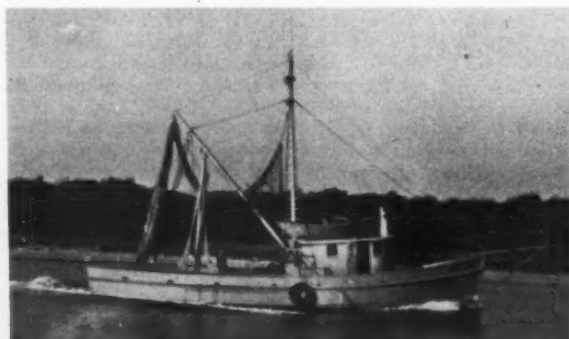
"Gertrude DeCosta" Leaves for Nova Scotia

The Boston fishing schooner, *Gertrude DeCosta*, long a well-known member of the local fishing fleet and the vessel that still holds the record for the largest mackerel catch, was scheduled to leave Boston last month in tow of a tugboat for Yarmouth, N. S., where she was to be given a Canadian registration and sail henceforth from that port.

Built in the famed boat yards in Essex in 1912 and registering 103 gross tons, she was one of the last of the old sailers of the Boston fleet.

Swordfishermen Stock Well

A total of 285 swordfish was brought to the Boston fish pier July 28, the largest number to that date this season. The three harpooners were the *Lady of Good Voyage*, having 133, *Rosemarie V.*, 80, and *Mary M.*, 72.



The 60' dragger "William D" owned and skippered by Capt. William D. Parsons, Jr. of Montauk, N. Y. She is painted with International paint and equipped with a 115 hp. Caterpillar D13000 Diesel, 2:1 Twin Disc reduction gear, 42 x 32 Columbian propeller, Willard batteries, Columbian rope, and Linen Thread Co. Gold Medal nets.

'Golden' Haddock in Catch

A golden haddock, its skin like burnished gold, was included in a haul of the Boston inshore dragger *Marietta & Mary*, docking at the Fish Pier early this month. Fourth of its kind to be landed here this year, the fish was nearly seven pounds in weight, and was caught 65 miles southeast of Boston Lightship. The flesh is gold-tinted from head to tail and the underbelly is pure white.

Widows of Two Lost Fishermen Receive \$55,000

The United States has agreed to pay a total of \$55,000 to the estates of two fishermen lost at sea on October 21, 1945, as the result of the collision between fishing vessel *Medford*, on which the men had been employed, and the S. S. *Thomas H. Barry*, an Army transport vessel operated by the government.

The sum of \$30,000 is to be paid to Mary R. Muise of Lynn, as the administratrix of the estate of John B. Muise, and \$25,000 is to be paid to Mildred Snow of East Boston, as the administratrix of the estate of Leonard N. Snow.

NEW YORK

Helicopter Takes Injured Fisherman Ashore

Fisherman Barney H. Stanteete, who suffered a leg fracture while at sea recently, was picked up by a U. S. Coast Guard helicopter and taken to the marine hospital at Staten Island, N. Y.

Stanteete, a crew member on the new scallop dragger *Bright Moon*, owned by Capt. John Melhus of Brooklyn, N. Y., was injured when the boat was in the Atlantic Ocean off New York City. He was placed in a life raft and trailed aft of the vessel. The helicopter then hovered above the raft and lowered a line by which he was drawn up into the aircraft.

New 38' Party Fishing Boat

The South Bay Boat Works of Patchogue, Long Island, New York recently delivered a new 38' boat for off-shore party fishing to Charles Walker of Southampton and Frank Tuma, Jr. of Montauk, joint owners. She is a smart looking boat, powered with a Chrysler Royal engine with 2:1 reduction gear for 12 miles speed.

The *Gannet* is 12 ft. 4 in. beam and 3 ft. 6 in. draft and has liberal freeboard. She was designed by William J. Deed, New York naval architect, with the details worked out by the yard's chief boat builder Stanley Grodeski.

"Nora" Harpoons 7 Swordfish

The beam trawler, *Nora*, in command of Captain Edward Fiedler, with a crew of Greenport men, while fishing off No Man's Land July 15, harpooned 7 broadbill swordfish. The fish averaged 234 lbs. and totalled 1638 lbs.

Fishery Council on Television

The Fishery Council's "Traveling Kitchen" presented four television shows, on major stations in July, on fish and shellfish cookery. FC aprons and napkins were worn. "Fish 'n' Tips" book was displayed and offered to the audience. FC's lobster ties and "Freddy the Fish" ties were worn.

Feldman to Repower Two Draggers

New 240 hp., 4 cycle Wolverine Diesels have been ordered by Capt. Benjamin Feldman of New York City for repowering his draggers *Rosalie F.* and *Catherine C.* The installations will be made in late Fall.

Hauled Out at Brigham's

At Brigham's Shipyard, Inc., Suffolk, the sea scallop boats *Florence B.* and *S-31* were hauled out for repairs. The fishing steamer *Steven McKeever*, owned by the Smith Meal Company, was also hauled out to have a propeller shaft replaced.

Colored Clams and Oysters

There have been more reports of green clams this year than any other previous year in history. Clams have been especially green this year in the Town of Babylon. Green clams have been found even in Islip township, around Greenport, East Hampton, and the report was that hard clams had turned green in Northport Bay, in a week's time.

Clams from Huntington Harbor are sometimes a distinct orange color. Oysters in Great South Bay of late years have had black gills. No one seems to know the cause of this phenomenon.

Great Lakes Fish to be Flown to New York

A plan is underway to ship freshly caught lake fish from Great Lakes ports to New York markets by airplane. Behind the proposal are the Michigan Fish Producers Association, the State Department of Aeronautics, and the Michigan Conservation Department.

To secure better prices and create a larger market for fish taken from Great Lakes waters, the two State agencies are now working out the major problems. These include the determination of the largest port centers in terms of air transportation facilities. Trial shipments have already been made, packaging problems solved, and first volume loads are now in progress. From Escanaba, Mich., no less than 7,200 lbs. of fish would be picked up, after the plan is in progress, and smaller loads would be taken from lower Michigan ports to Detroit and from there to the New York market.

Production Generally Good

Commercial fishing, generally, in the Great Lakes region has been fairly good. At mid-Summer, however, there was a sharp decline from an earlier peak production. In all ports of Lake Superior, commercial fishermen have reported a fairly steady production of whitefish, but lake trout yields were light compared with June and early July. Minnesota, Wisconsin, and some of the Ontonagon, Mich., fishermen were getting good catches of cisco/trout, however.

Notwithstanding a steady production of whitefish in some areas of Lake Superior, the price of this species has gone up to a point comparable with that of mid-Winter. Despite the decline of fish production among trout netters, Lake Superior trollers are enjoying good catches of large lake trout, and report a profitable season thus far.

Walleye pike catches in the Bay De Noc areas of Green Bay have fallen off to fair yields. However, fishermen in the area have been getting numerous 2-lb. trout recently, which indicates that although trout are small they still abound. Perch production from Lake Michigan in most netting areas has been good, while whitefish production has been running fair with an occasional good haul from pound nets.

Catches of whitefish from Lakes Huron and Erie were steady up until July 7 when a noticeable drop occurred in general production. Pike yields by both American and Canadian commercial fishermen operating on Lakes Huron and Erie have been fairly good, while in the former, perch takes have been spotty.

"Roamer" Capsized

A sudden squall hit Lake Superior on July 3, and the fish boat *Roamer* of Munising, Mich. was capsized off Grand Island with eight persons aboard. Capt. Fred Lukowski died at the wheel.



The 52' tug "Rambler II" owned by Fred Schmekel of Rogers City, Mich., and skippered by Capt. Harry Lindsay. She is powered by a 50 hp. Kahlenberg Diesel with a 36 x 34 propeller.



The 36 1/2' trap net boat "Chappie" owned and skippered by Capt. Henry Beatty of Kelley Island, Ohio. Using Gulf lubricating oil and Linen Thread Co. Gold Medal nets, she is equipped with a 115 hp. Chrysler Crown gasoline engine with 3.5:1 reduction and a 26 x 26 Michigan propeller.

of the craft from a heart attack. The seven survivors clung to the wreckage for two hours before being rescued by Everett Morrison in his speed boat.

Michigan Whitefish Catch Normal

The total May catch by commercial fishermen in Michigan waters of the Great Lakes was 2,372,000 lbs., according to a Conservation Department report. Whitefish production in Lake Michigan held above normal at 412,000 lbs., the Lake Superior whitefish yield was normal at 58,000 lbs., but the 52,000 lbs. taken in Lake Huron was below normal.

In Lake Superior, the trout catch increased 80,000 lbs. over April to reach 383,000 lbs. However, the Lake Michigan production of trout dropped sharply in May to 23,000 lbs. and in Lake Huron the yield was only 72 lbs.

Commercial fish production in Michigan waters totalled 7,300,000 lbs. for the first five months of 1949, apparently a low figure when compared to the 30,000,000 lbs. caught in 12 months last year.

Superior Trout Propagation Favored

Fear of a sea lamprey invasion in Lake Superior was voiced by fishermen attending a recent hearing at Washburn, Wis. for consideration of a plan to resume and expand a lake trout propagation program. Commercial fishermen were said to favor revival of the trout propagation program under which some had permits to catch trout during the Fall spawning season, collect and fertilize the eggs and turn them over to State hatcheries.

"Ruth" Saved from Sinking

The Circle Fisheries Co. 75' tug *Ruth*, Capt. Clyde Shaw, limped into Erie Harbor July 7, listing by 10 degrees. She had taken on four feet of water during a three-hour battle with six-foot-high waves. It was believed that the water leaked in around a loose plate or a dislodged rudder post. The *Ruth* was escorted into harbor from 17 miles out by a Coast Guard crash boat and life boat.

Open Drive Against Canadian Poachers

An intensive drive to keep Canadian fishermen on their side of the border has been started in Lake Erie, according to Edward F. Lee, Pennsylvania Fish Warden at Erie.

That Canadian fishing boats are ignoring warnings against poaching in U. S. waters, is indicated by a recent discovery of more Canadian gear. Lee said that U. S. patrols picked up eight expensive nylon nets, 24 cans and two buoys in Lake Erie about 16 miles northeast of Erie. He believes the Canadian craft cross the border about three times a week, leaving their nets cast throughout the week.

New Chris-Craft Engine Distributor

The appointment of Skipper Marine Sales, Inc., Detroit, as marine engine distributor for the State of Michigan has been announced by Wayne Pickell, Chris-Craft Corp. general sales manager.

George Cooper, partner and manager of Skipper Marine Sales, was formerly sales manager for another large engine company and is well acquainted in Michigan marine circles.

Gloucester Firms Sponsor Commercial Tuna Contest

Cash prizes are being offered in a tuna tournament sponsored by John F. O'Hara, president of Davis Bros. Fisheries, Gloucester, and R. Dana Towle, operator of the Annisquam Market. The tourney runs from July 1 to November 1 and all fish entered for prizes must be sold to Davis Bros., Inc.

The first prize of \$500 cash is for the person landing the heaviest total poundage of tuna, for the season, sold to Davis Bros., Inc., and caught by commercial fishermen by means of keg line, hand line or harpoon. Cash prizes of \$250 each will go to the one catching the heaviest tuna of the season other than by rod and reel; and for the heaviest total poundage taken on any one day during the season by commercial fishermen other than by rod and reel.

Through July 27, a total of 107 tuna weighing 48,521 lbs. had been landed at the Annisquam Market pier to be entered in the tourney. In the race for the \$500 cash prize for heaviest weight caught by keg line, William Stanwood is in the lead, having 19 tuna, total weight, 9,712 lbs. In second place is his brother, John Stanwood, 18 tuna, 9,659 lbs.; third, Russell Young, 18 tuna, 8,946 lbs.; fourth, Fred Larsen, 11 tuna, 4,674 lbs.

Action in Ipswich Bay tuna fishing stepped up sharply during the three-day period running from July 23-25, with large schools of heavy fish reported. A total of 88 bluefins were taken during this time on rod and reel, by keg line and by harpoon, from boats fishing out of Annisquam, Newburyport, Ipswich and Rockport.

Dragger "Lucretia" Sinks

The 51-year-old 57' Gloucester whiting dragger *Lucretia* sprung a leak five miles south of Isles of Shoals and sank July 14. Her crew was rescued by the dragger *We Three*, Capt. J. Randall Lafond. The crew included Capt. Stephen J. Biondo; his father, Joseph, engineer and owner; Vito Tocco; and John Diguilio.

The *Lucretia* was towing her net when water was discovered pouring into the fish hold. When pumping proved useless, the skipper radioed for assistance. The *We Three* appeared at that time, and stood by to take off the crew.

A Coast Guard plane and patrol boat responded to the radio message and attempted to save the vessel. The plane dropped large rubber life rafts which the crew of the patrol boat tried to use as pontoons along with its own raft. However, the *Lucretia* went under before the plan was carried out.

Big Day's Landings

The largest fresh fish receipts in Gloucester last month through the 25th were reported on that day when a total of 36 vessels accounted for 2,547,500 lbs. Throughout most of the month, daily landings amounted to over a million lbs. and on six occasions topped 1,300,000 lbs.

In spite of these impressive figures, whiting and mackerel fleets had a lean month. To supplement their income, whiting fishermen were bringing in trash fish for the dehydrating plant. Mackerel seiners also were said to be considering fishing for porgies for the dehydrating plant.

"White Owl" Launched

The 48' x 13' x 6' boat *White Owl* was launched in Annisquam River near the Cape Ann Anchor Works last month. The new boat, built and owned by Capt. Willis W. Leveille, will be used in trap fishing and dragging. The craft was constructed in the owner's backyard with Bill Ross, veteran Essex shipbuilder assisting.

Swordfishing Improves

Five swordfish trips were reported for Gloucester boats by the 20th of last month with a total of 462 fish landed at Boston and Gloucester. This is a big increase over the June total of 128 fish for the two ports.

Catches were as follows: Evalina M. Goulart, Capt. Manuel Carise, with 168 fish for her first fare of the season; Jorgina Silveira, Capt. Alvaro Silveira, 130; Evelyn G. Sears, Capt. Johnny Burnham, 118; Magellan, Capt. Eddie Silva, 40; and Theresa M. Boudreau, 6.

Standard Fish Opens Branch

Due to the strike in Boston, Standard Fish Co. of that city, reopened its Gloucester fillet plant which had been closed since

1946. The parent concern owns the trawler *Esther M.*, and the scallop draggers, *Antonio* and *Antonina*.

New Dehydrating Plants Completed

The new and ultramodern plant of the Dehydrating Process Corp. at the State Fish Pier in Gloucester was formally dedicated July 28. The factory, which is 210' x 65' and of steel construction, represents a new idea in dehydration, fostered by John Ryan, founder and president of the firm and also founder-president of Gloucester Ice & Cold Storage Corp. and Fort Wharf Ice Co. It is claimed that the new process will result in providing the nation's poultry and livestock with all the vitamins contained by fish, in as fresh a condition as in their native state.

The new dehydrating plant of the Gloucester By-Products, Inc. at the State Fish Pier measures 121' x 62', is walled with corrugated transite, a composition of cement and asbestos, and the floor is entirely of concrete.

Officers of the concern include the following: John DelTorchio, president and general manager of Cape Ann Fisheries, Inc., president; James Bordinaro, a partner in the Empire Fish Co., treasurer; Frank Cefalo, owner of the North Atlantic Fish Co., clerk; and directors, the three officers and Capt. Frank Favalora, owner of Harbor Cove Fisheries.

Fishermen's Institute Fund Drive

Members of the Fishing Industry and Boats Division for the fund raising drive of the Gloucester Fishermen's Institute were announced July 30 by Everett R. Jodrey, chairman of the Division, and New England Manager of R. J. Ederer Co., as follows: Alphonse Hayes and George H. Hodgdon, Atlantic Fishermen's Union delegates; Ben Curcuru, manager, Producers Fish Co.; Charles F. Pearce, assistant treasurer, Gorton-Pew Fisheries Co., Ltd.; Bruce Shoares, manager, the Shoares Fisheries; John DelTorchio, president, Cape Ann Fisheries, Inc.; Manuel P. Domingos, Jr., treasurer, United Fisheries, Inc.; Lawrence C. McEwen, district manager, Cooper-Bessemer Corp. Even before the scheduled opening of the drive on August 8, many of the boats had pledged substantial contributions.

Boats Get New Batteries

The Evelyn G. Sears, Capt. John Burnham, and the Doris F. Amero, Capt. Nelson Amero, have been equipped with HHG-31, 32-volt Surrette batteries. The Barbara C., Capt. Charles Palmisano, has a new HHG-25, 32-volt Surrette set for engine starting. Capt. Philip Curcuru has purchased an additional set of GTS-21, 32-volt Surrettes for the *Philip & Grace*, and the Florence & Lee, Capt. James Sheves, has been furnished a 114-volt set of HHG-25 Surrette batteries.

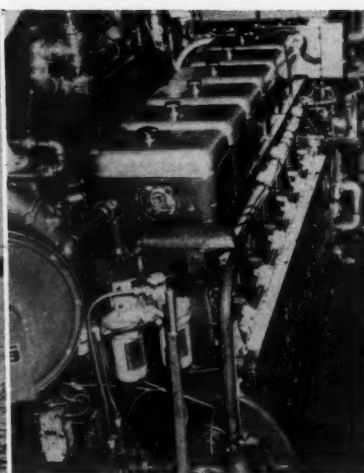
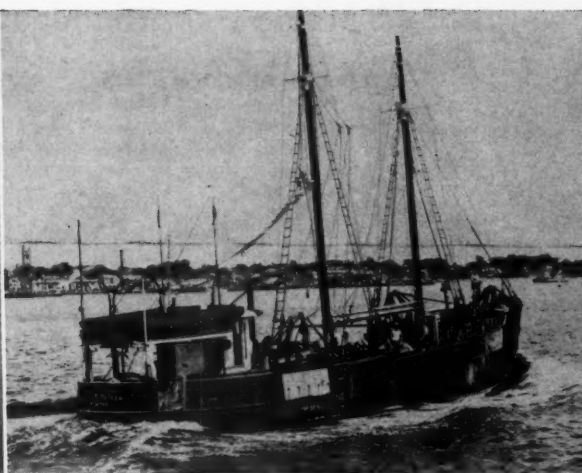
The 107' trawler *Esther M.*, owned by Standard Fish Co., Boston, has been equipped with a set of 114-volt, GTS-15, 240 ampere hr. Surrette batteries, sold by Louis Posner.

Andersen Predicts Fishing Trends

Forecasts of fishing trends are being made by Andersen Laboratories, 76 Egmont St., Brookline 46, Mass., and broadcast on the radio in 30 states and four Canadian Provinces. The predictions, ranging from excellent to very poor fishing, have been checked at Boston for 30 weeks by General Seafoods Corp. against their trawler operations. Results show the forecasts to have an average correctness of 93%.

Frank A. Andersen, director of the Laboratories, explains that the calculations are made by correlating the right ascension positions of the moon with past events. In other words, his forecasts are based on the theory that when the moon approximates or comes into exact position with one that has occurred in the past, fishing conditions which are known to have existed at that time will repeat themselves.

To give an example of the use to which his forecasts may be put, Andersen says, "A normal catch for trawlers around Boston is about 80,000 lbs. of fish in an eight to nine-day period. From March 25 at 12 noon to March 26, 12 noon, a trend appeared on our charts which indicated that the trawlers would hit the jackpot. This fact was told to the skippers in advance. The fleet sailing out of Boston caught from 100,000 to 195,000 lbs. of fish in 24 hours."



Capt. Olaf Anderson, left, and his 94' New Bedford, Mass., dragger "Stanley B. Butler". Right, the vessel's new 6-cylinder, 9 x 11 1/2, supercharged, direct reversing Nordberg Diesel. Sold by Atlantic Engine Supply, Inc., the engine is rated 480 hp. at 720 rpm., has 2:1 reduction gear and swings a 64 x 48 propeller, giving the dragger a speed of 12 knots.

NEW BEDFORD

Scallop "Ramona" Sunk

Capt. Alf Josefsen, of Fairhaven, Mass. and two members of his crew were lost July 31 when their 80-foot scalloper, *Ramona*, of New Bedford was rammed and cut in two by a cargo ship. The crash occurred 40 miles northeast of Nantucket Lightship in heavy fog. Lost with the skipper, son of the vessel's owner, Nils Josefsen, were Carl Naley and Augustus R. Carlson, both of New Bedford. Seven men were rescued by the freighter and later put ashore at Race Point, Nantucket. The *Ramona* was valued by her owner at \$50,000.

"Uncle John" Engine Recovered

The engine of the 110' Gloucester fishing vessel *Uncle John*, sunk in a gale off Dumpling Rock in November, 1947, was raised in July by a salvage crew headed by Edward O. Sanchez of New Bedford. Richard Saunders was diver for the operation.

Overhauling Activity

The fishing vessel *Jacinto*, owned by Correia and Sons of New Bedford, has been up at Hathaway Machinery Company yard, Fairhaven, for complete overhaul. The Hathaway firm's recently-acquired scalloper, *Dorothy and Mary*, made her first trip for her new owners in July, skippered by Gunnar Pedersen.

Pierce and Kilburn yard, Fairhaven, expected to put the *Marmax*, rammed by a luxury liner in June; back in the water August 15. The same firm has had Alexander Smith's *Wamsutta* up for complete painting.

D. N. Kelley and Son, Fairhaven, expected to haul the *Solveig J.*, hit by a Boston beam trawler July 31, early in August for repairs.

Palmer Scott and Co. Inc. has rebuilt the New Bedford vessel *Sea Hawk*, damaged by fire this Summer, from midship aft, and estimates she will resume fishing this month. Felix Orlandella is owner.

Protest Discontinuation of Safety Aids

The proposal of the Coast Guard to discontinue lightships *Vineyard Sound* and *Handkerchief*, and the Cape Cod Lifeboat Station at Truro, Mass. has been protested vigorously by New Bedford fishing interests. A hearing was held July 14 at which seamen of this port were represented. No final decision was available August 1.

Captain John P. Salvador

Captain John P. Salvador, affiliated with the New Bedford fishing fleet for 10 years and a commercial fisherman all his life, died July 11 at his home in New Bedford of a heart ailment.

He was 56. Captain Salvador owned the *Victor Johnson*, the *Pearl Harbor* and the *Growler*, all of this port, and had owned formerly the *Three and One* and *One*, which he designed himself; the *B and E*, and the *Phyllis J.* A native of Vineyard Haven, Mass., he was a director of the Seafood Producers' Assn.

State Plans Oak Bluffs Lobster Hatchery

Construction of a lobster rearing plant at Oak Bluffs, Martha's Vineyard at \$42,500 is provided for in the supplementary budget of Gov. Paul A. Dever issued last month.

The lobster plant, a wooden structure with six rearing tanks, would produce an estimated 1,000,000 additional lobsters a year. Female lobsters with eggs would be used in the plant. When the eggs had hatched and the young grown to one inch, they would be distributed throughout the Commonwealth and released.

The rearing tanks would be used from early April to June or July. Martha's Vineyard was picked as the site for the plant because the water there is the warmest in the State.

N. H. Coast Guard Station Closing Opposed

A charge that the Federal government in attempting to close the Hampton Beach Coast Guard station was discriminating against New Hampshire was made at a public hearing held July 11. More than 100 persons attended the hearing.

Approximately 20 people spoke in opposition to the closing. James W. Tucker, representing the New Hampshire Legal Lobster Association, vigorously criticized the attempt to close the station.

Portsmouth, N. H., Race Won by Maine Man

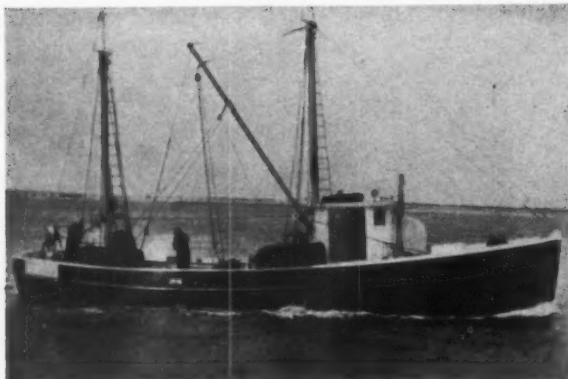
Lyman "Gus" Alley, Kittery, Me., lobster fisherman, won the New England lobster boat championship at Portsmouth, N. H., July 11. He covered a 4.2-mile course at a speed of slightly better than 22 miles per hour.

Despite a protest registered by the defending champion, William Marconi, that Alley had cut to the wrong side of a marker buoy, Alley's win by nearly 30 lengths erased all claims that a foul had been committed by the Kittery contender, who was last year's runner-up and 1947 New England champion.

Charles Hosmer Morse III

Charles Hosmer Morse III, vice president in charge of manufacturing, Fairbanks, Morse & Co., Chicago, and eldest son of Col. Robert H. Morse, president of the Company, lost his life when the Company's plane crashed at Roanoke, Illinois, July 9.

He had been connected with the Company since 1919, and and worked in the Company's factories at Beloit, Wisc., Three Rivers, Mich., Indianapolis, Ind., and St. Johnsbury, Vt. Later he was assigned to Company branches in many parts of the United States. He was a brother of R. H. Morse, Jr., vice president in charge of all operations of the Company.



The New Jersey dragger "Mary Ann II" owned by Capt. John Larson of Barnegat City. She is powered by a Cummins Diesel equipped with a Twin Disc MG-300 reverse and reduction gear and a Twin Disc front power take-off.

New Jersey Charter Boats Report Fine Catches

Fishing news took a turn for the better the last week end in July with New Jersey fishermen reporting many fine catches of bluefish.

Bay and surf fishing remained good with catches of weakfish and kingfish being reported. Fluke were also being taken in large numbers in the bays. Paul Kaetzel, boatman from Barnegat Light, reported catches over the week end of 70 fluke.

On July 30 the *Pompano*, skippered by Captain F. G. Brown, sailing from Coney's Dock in Beach Haven, reported a catch of 54 bluefish and one 50 pound red drum fish. On July 31 the *Pompano* came in with a fine catch of 152 bluefish, 2 mackerel and one 25 pound hammerhead shark.

The Howe Brothers Yacht Basin in Beach Haven reported a grand total of 386 bluefish taken by five boats.

At the Beach Haven Yacht Club, the following catches were reported: July 30, Captain Henry Schoenberg in the *Henrietta III* landed 64 bluefish and one dolphin. Captain Tom Jones in the *Miramy* came in with 60 bluefish, 17 amberjacks, three dolphin.

Record-Breaking Marlin and Fluke

The *Albatross*, skippered by Captain A. M. Brown, Beach Haven, on July 12 landed a prize white marlin and on July 24 landed one of the largest fluke caught there in years.

The marlin tipped the scales at 81 pounds with a girth of 29 inches and a length of 8 feet, while the fluke tipped the scales at 13 pounds, three ounces and was 31 inches in length with a girth of 14 inches.

Daughter of Fisherman, Seafood Princess

Anita Carlson, daughter of New Jersey commercial fisherman, Oscar Carlson, became the State's first Seafood Princess July 14.

Miss Carlson will represent New Jersey throughout the year, drawing attention to the value of this State's seafood products. Her appearance at popular events and on television will culminate in a place of honor at the National Seafood Festival in September.

Clam Processing Factory for Wildwood

A new industry is about to be located at the Cape May County-Wildwood Airport, it was learned July 21 following an inspection of the area.

William Kleb of the New England Fisheries plans to establish a clam processing factory. Thirty persons will find employment at the start, to be augmented by thirty additional workers.

Wildwood Fisherman Injured at Sea

Ehlko Friesenberg of Wildwood Crest was the victim of an unusual accident at sea July 15.

Friesenberg, owner of the dragger *Irma Pauline*, was cutting up a shark when his knife slipped and severed a leg artery. As he was losing considerable blood, the *Irma Pauline* radioed to the Coast Guard for medical aid, and he was removed to Boston.

Maine Has Abundant Run of Porgies

Porgies have returned to Maine waters in numbers unheard of in recent years. They are causing complications, not because they are unwelcome but because they are unexpected. Various veteran fishermen say that they may have driven the herring out and are cleaning up the sardines. Others say that the porgies, also called menhaden, have eaten all the food and other fish have gone elsewhere because of the lack of food.

A controversy about the legality of porgy fishing developed when the 110' Reedville, Virginia seiner, *Pluck*, was ordered to cease fishing for porgy in Casco Bay.

The Maine Sea & Shore Fisheries Dept. ruled that the vessel could not fish in Maine territorial waters unless she had a crew of fishermen licensed in Maine. The question of where the 3-mile limit lies in relation to the coastal islands still is under debate, but the *Pluck* now is fishing for porgies off the Massachusetts coast.

Lobster fishermen from Brunswick have entered the contention that no seiner from Virginia or Maine can legally fish for porgies in the waters of Winnegance Bay. They are accusing the porgy fishermen of depleting the only bait available to lobster fishermen. They are afraid the species will be cleaned out and the porgies will disappear again.

Meanwhile a sizable number of smaller boats in the Portland area are reaping a harvest from the porgies, and most of their catch is being processed into meal and oil by Deep Sea Products, Inc. at South Portland.

Lobster Festival at Rockland

The second annual Maine Lobster and Seafoods Festival was held in Rockland August 5-7. Sponsored by the Rockland Junior Chamber of Commerce, under the direction of Rupert Neilly, Jr., the Festival was a great success with an estimated attendance of 10,000.

On the opening day, a huge display of marine and Maine products was shown at the public landing, scene of the main festival, which included gigantic lobster feeds on the last two days.

Among the special guests were John H. Matthews, past secretary of the Mid-Atlantic Fisheries Assoc.; Wilbur M. Chapman, special assistant to the Undersecretary of State; and Charles R. Carry, director of the National Canners Assoc., and they were taken on a tour of fish producing facilities by Maine Fisheries Commissioner Richard Reed.

The Festival also featured a Fisherman's Follies and a coronation ball at which Signe Swanholm of Thomaston was crowned Miss Maine Seafoods. A parade of floats, in which General Seafoods and Feyler's were outstanding, a band concert, a lobster eating contest and a square dance rounded out the three-day affair.

Among the exhibitors at the Festival were Cuprinol Division of Darworth, Inc., which showed its line of wood, rope and net preservatives; and Baker Refrigeration Corp., which displayed refrigeration equipment; the Maine Sea and Shore Fisheries Department which featured a typical lobsterman in action, and presented a colorful display of fish products packed in Maine.

Marine Service, Inc., of Boothbay Harbor, in conjunction with Snow Marine Basin, Inc., of Rockland, had an extensive exhibit of marine equipment, including Danforth anchors, Kelvin-White compasses, Submarine Signal Fathometers, RCA telephones and direction finders, General Electric telephones, Columbian propellers and steering gear. They also showed their new "M-S" copper naphthanate base, rope and wood preservative, and Tubbs cordage for which they have been made Maine distributor.

To Repower Three O'Hara Draggers

The 82' draggers *Jeanne D'Arc*, *Villanova* and *Notre Dame*, owned by F. J. O'Hara & Sons, Inc., Portland, are to be repowered this Fall with new Model 40, 6 cylinder, 8½ x 10½ Superior Diesels. Sold by Harbor Supply Oil Co., Portland, the engines are rated 250 hp. at 750 rpm., and will be fitted with extra heavy, specially designed, Snow-Nabstedt 2:1 reverse and reduction gears. The engines will have dual hydraulic push-button control for the engine room and pilot house. They will swing

56 x 42 Columbian propellers through 4 1/4" Goodrich Cutless stern bearings.

The 35' porgie fisherman *Judda*, owned by Capt. Walter Lee-man of Bailey Island, has been equipped with a 20-watt Kaar radiotelephone. The 38' sardine seiner owned by Miller & Mad-son Inc. of Portland, has a new Submarine Signal, Model 1373 Fathometer Jr. recorder. Both instruments were sold by Sargent, Lord & Co.

Fulham Opens Portland Plant

A new fish packing firm, Fulham Brothers of Maine, Inc., has opened a plant on Central Wharf in Portland. Managed by Capt. Harold Paulson, the concern is affiliated with Fulham Brothers of Boston. It will specialize in the production of frozen redfish and whiting fillets, and will secure the bulk of its fish supply from local boats.

Will Shuck Clams in Maine

Maine's new law prohibiting export of all but small shipments of clams in the shell may bring a \$1,000,000 annual payroll to the State, according to Commissioner Richard E. Reed.

He said most out-of-State dealers are planning to open shuck-ing houses in Maine to comply with the new regulation, de-signed to keep shucking payrolls in the State. The law permits resident dealers to ship small quantities of clams in the shell for use as steamed clams.

The dealers agreed, Reed said, that they should work as a group to enforce the law which forbids taking of clams less than two inches long. Reed said his department and the indus-try regard the law as a necessary conservation measure.

Prytherch at Boothbay Harbor

Dr. Herbert F. Prytherch of the Beaufort, N. C. Fish & Wild-life Service laboratory has been assigned to the Service's clam research program at Boothbay Harbor, and will work with John B. Glud, chief of the clam study project.

Underwood Carrier to Be Repowered

The 70' sardine carrier *William Underwood* owned by Wm. Underwood Co., Jonesport, is to be repowered with a MRDB6, 170 hp. Sterling-Viking Diesel with 3:1 Snow-Nabstedt reduc-tion gear, fresh water cooling and front power take-off. The engine was sold by The Edson Corp. and will be installed at General Seafoods Shipyard, Rockland.

Hodgdon Builds Boat for Lewis

The Boothbay Harbor boatyard of Norman Hodgdon, Jr., re-cently launched a 23' lobster boat for Charles Lewis of Boothbay, which is powered by a 25 hp. Gray Sea Scout engine.

Moreton Moves Portland Branch

Walter H. Moreton Corp. has moved its Portland branch from 88 Preble Street to 1004 Congress Street, Portland 4, Me. Charles McDonald continues in charge of the branch. The Moreton Com-pany, which has headquarters at Cambridge, Mass., is distributor of General Motors, Chrysler, Red Wing and Arnolt marine engines.

Big Tuna Brought in Boothbay Harbor

The biggest tuna caught off Boothbay this season, a 703-pound monster, was brought into Fisherman's Wharf July 15, by Wil-liam Tower of Ogunquit.

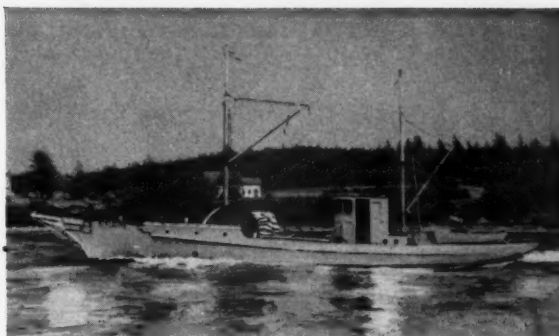
A commercial fisherman, Mr. Tower fishes from a boat spe-cially rigged and equipped for harpooning tuna. He has brought in a number of big fish to Fisherman's Wharf this season.

Pemaquid Co-op Successful

At a recent meeting of the Boothbay Region Fisherman's As-sociation, Cecil Jones, president of Pemaquid Fisherman's Co-operative Association, gave an account of his organization's activities.

With only \$1,500 capital and no land or buildings, the co-op has expanded in two years so that it now has a modern 135-foot wharf with complete facilities for marketing lobsters and a well-stocked store. Last year 150,000 lbs. of lobsters were marketed by the organization, and it expects to double that figure this year.

It was emphasized by Jones that this gratifying progress was possible even though the cooperative paid its members from three to seven cents more per pound for their catch than the regular local market price. In addition, at the end of the year, profits are returned to the members in the form of dividends,



The 64' sardine carrier "El Placita", a converted yacht owned by Machiasport Canning Co., Machiasport, Me. Skipped by Capt. Thomas Alley, she has a capacity of 45 hogsheads and is equipped with a 110 hp. General Motors Diesel with 3:1 reduc-tion, 34 x 28 propeller, and a Hudson American radiotelephone.

each fisherman receiving an amount proportioned to the pound-age of his catch brought into the co-op during the year.

A branch of the Pemaquid Cooperative recently was estab-lished at New Harbor where dock and supply facilities are maintained. Francis Gott is manager of the branch, which has 13 members.

Dragger "Coquina" Burns

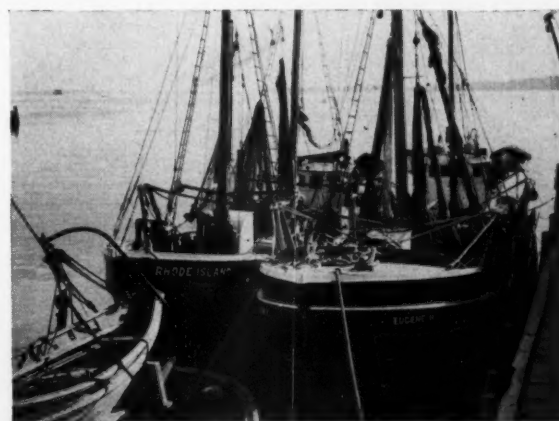
The 40' Tenant's Harbor dragger *Coquina*, owned by Pearl Trask, burned to the water's edge July 4 as the result of an engine backfire. She was moored in the harbor when fire started, and had to be towed to a wharf for the fire department to ex-tinguish the blaze. The vessel is considered a total loss.

U. S. Refuses Aid in Removing Weirs

Both the U. S. Coast Guard and Army Engineers have turned down a request by the Maine Department of Sea and Shore Fisheries for assistance in removing the remains of approximately 200 abandoned herring weirs along the Maine Coast. Herring seiners claim that the old weirs hamper their operations and damage thousands of dollars worth of nets each year.

The Army Engineers claim that a survey of the situation re-vealed that such assistance is beyond the jurisdiction of the U. S. since the weirs are not a menace to navigation, and that it is a matter for local authorities to handle.

Sea and Shore Fisheries Commissioner Richard E. Reed says that as the job is too big and expensive for his department to handle the situation will have to wait pending a further review by the Legislature.



Docked at the General Seafoods plant in Rockland, Me., are the 71' and 77' draggers "Rhode Island" and "Eugene H." The former is owned and skippered by Capt. William Howell of Southwest Harbor and powered by a 265 hp. Hendy Diesel. Rhama Philbrick of Rockland owns the "Eugene H.", Capt. Ronald P. Whiffin skipper, and she is powered by a 180 hp. Superior Diesel.

How to Adjust Compasses

(Continued from page 16)

earth, both in direction and amount. This is because the exhaust pipe is held in a fixed position. When the engine is started, the pounding of the exhaust pipe may tend to make the pipe "hold" this magnetism, while the heat tends to make it "spill" the magnetism. From a practical point of view, God only knows which tendency wins out or by how much. It depends on such things as how heavy the pounding is and how hot the exhaust pipe gets.

In her run to the Banks, this vessel may follow close enough to a given magnetic meridian of the earth to pick up the kind of transient magnetism opposite to that held by the exhaust pipe at the dock. If the compass were adjusted upon leaving the dock, it probably would be found to be considerably in error by the time the vessel reached the Banks. On returning to the port she left, this vessel's compass probably would lose most of this error, but perhaps not enough for the compass to be correct again.

If the compass adjuster can get to work on this vessel when she is in an average state, that is, when transient magnetism is at the mid point between its plus and minus effects, a fair compass job for all conditions may result. This, however, is easier said than done.

It should be evident that the only really effective remedy for our false friend, transient magnetism, is to arrange the area around a magnetic compass so that the causes of transient magnetism will be cut to an absolute minimum.

Most competent compass adjusters keep a record of the work they do and the problems they run into on various vessels. This backlog of data is often a great help in eventually ironing out the tough problems of cranky vessels. It can be very poor policy to shift from one adjuster to another in an effort to straighten out a cranky vessel.

Often the first adjuster has told the client how to remedy the trouble, but the client can't see spending the necessary money to rearrange a pilothouse (that never should have been set up the way it was in the first place). This same client often will spend more money for any number of compass adjustments than it would have cost to fix the pilothouse right originally, and still have nothing to show for his money.

To sum up the entire matter of when to adjust the magnetic compass, the following list gives a plan for average conditions:

- (1) Have compass adjusted before putting a new vessel in service. Prolong this as much as possible, as previously indicated.
- (2) Have compass checked for errors after three months service and readjusted if necessary.
- (3) Repeat No. 2 after yearly outfitting time.
- (4) Check compass continuously, following procedure previously given. Call in experienced compass adjuster if new errors of any size show up.

Don't move or permit anyone to move any of the adjustment magnets, quadrantal spheres or Flinders bars unless you are absolutely sure that you or they know exactly what to do, how to do it and why it should be done.

The Process of Adjusting

Compass adjustment is best done in calm water and on a clear day. A large enclosed body of water, where there is not much traffic, is ideal. The following steps generally are taken for a simple compass adjustment.

1. Employ some reliable means of setting the vessel accurately on a series of required magnetic courses. This may be done by running down a series of



Fig. 6—Conventional compass card marked in degrees and quarter points.

previously determined range lines; or by using ranges to distant objects; or, in clear weather, by using known positions of the sun, calculated in advance for the exact time that observations are to be taken; or by expedient combinations of any of these procedures.

2. By estimation, set the iron spheres, one to port and one to starboard of the compass. Also by estimation, set the vertical magnet which hangs directly below the compass. That is to say, set these correctors by intelligent guesswork plus previous knowledge of the vessel or vessels like her. (See Figure 4).

3. Head magnetic EAST and make compass read east by setting adjusting magnets, pointing forward and aft, at the

proper distances from compass. Magnets should be level and their centers should fall in a perpendicular athwartship plane passing through the compass center. (See Figure 4). This is known as semicircular correction.

4. Head magnetic SOUTH and make compass read south by setting adjusting magnets, pointing athwartship, at the proper distance from compass. Magnets should be level and their centers should fall in a perpendicular fore-and-aft plane passing through the compass center. (See Figure 4). This also is known as semicircular correction.

5. Head magnetic SOUTHWEST and make compass read southwest by adjusting the settings of the iron spheres, one to port and one to starboard of the compass. Centers of spheres should be at same level as compass needles and at same distance, port and starboard, from compass center. (See Figure 4). This is known as quadrantal correction.

6. Head magnetic NORTH, with magnetic compass taken from its mount and placed at least 10' away. Hold a dip needle, properly adjusted for the locality, in this mount pointing magnetic north, and hold at a height so that pivot of this dip needle is at same elevation as compass needle when compass is mounted. Raise or lower the vertical magnets hanging directly below the normal compass position until this dip needle comes to rest in a horizontal position. Remove dip needle. Make vertical magnet fast so that it hangs about two inches lower than the point just determined by dip needle. Replace magnetic compass. This is known as heeling error correction.

7. If the spheres (quadrantal correctors) or the vertical magnet (heeling magnet) had to be moved much from their previously estimated positions, the entire procedure outlined above should be gone through again.

8. The adjustment for east should hold good on west, the adjustment for south should hold good on north, the adjustment for southwest should hold good on northeast, southeast and northwest. Such is not always the case, and therefore, it may be necessary to halve out errors by running reverse courses etc., while juggling the various correctors. For example, after adjusting out all error on east, a 2° error may be found to exist on west. By changing the correctors slightly, conditions can usually be arranged so as to divide this error equally—putting a 1° error on east and leaving only a 1° error on west.

9. When all errors have been reduced to a minimum by adjusting, record residual deviations (remaining errors) on a card for future use by the helmsman in correcting courses. (See Figure 5). This is conveniently done by putting vessel on correct magnetic headings and comparing actual compass readings. As a rule, these comparisons are made every two points

MAGNETIC COURSE FROM CHART		COMPASS DEVIATION		COURSE TO STEER BY COMPASS	
Deg.	Pl.	Deg.	Pl.	Deg.	Pl.
0	N				
22½	NNE				
45	NE	½E	½E	043½	NE ½N
67½	ENE				
90	E				
112½	ESE				
135	SE				
157½	SSE				
180	S				
202½	SSW				
225	SW	½W	½W	226	SW ½W
247½	WSW				
270	W				
292½	WNW				
315	NW	½W	½W	316½	NW ½N
337½	NNW	½W	½W	338½	NNW ½N
360	N				

Limit of Accuracy of Work—less than 1/16 in. To calculate Compass Courses ADD WESTERLY deviations and SUBTRACT EASTERLY deviations to and from Magnetic Courses. Reverse procedure to calculate Magnetic Courses from Compass Courses.

Maine Engineering & Navigation, Inc.
178 Middle Street, Portland, Maine
E. B. Sawille
Date 26 Sept., 1948
Compass Lionel # 11922
Prager SILVER BAY Home Port PORTLAND, ME.
Adjustment Conditions Good—Used Sun Azimuths

Fig. 5—Compass deviation card showing results of typical adjustment.

South Carolina May Have Large Off-Shore Clam Beds

Large beds of clams may exist off-shore along the South Carolina coast according to G. Robert Lunz, director of Bears Bluff laboratories. Mr. Lunz said a seafood producer at Beaufort reported that the October 1944 hurricane washed back the shore of Trenchard's inlet and exposed a clam bed three-fourths of a mile long. The clams were so thick that there was not a hand's breadth between them, the fisherman reported.

Shrimp trawlers report taking occasional clams in nets off-shore, and clam shells found on local beaches indicate clams in the ocean. How extensive the beds are is not known.

Protest Shrimping Restrictions

The South Carolina Seafoods Conservation Association, coastal commercial fisheries group, has criticized shrimping restrictions in Charleston County. Morris D. Rosen, attorney for the group, said: "We are at present the only County to have restrictions on offshore shrimping. We are the only County with a closed season as long as five months."

"Obviously States such as Florida and Louisiana, which have spent thousands of dollars for research, would have these restrictions if they were of any value."

Two Trawlers Explode

The 35' shrimp trawler, *Mary Jean*, exploded and burned August 2 in Stono inlet, injuring its skipper, John F. Fortenberry, and one crew member. The boat was operated by D. Fischer Seafoods of Folly Beach.

The 32' shrimp trawler *Guillermo* was badly damaged when she blew up and burned on July 30, near Mt. Pleasant, as she prepared to move out of Shem Creek where she was moored alongside 10 other trawlers. Several of the other boats were scorched, but all escaped serious damage. The trawler is owned by J. M. Ruddock, and skippered by Capt. John Singleton.

C. L. Young to Remain on Board

Governor J. Strom Thurmond has reappointed C. L. Young of Georgetown as a member of the State Board of Fisheries. His term will end July 9, 1952.

(22½°) for compasses marked in points and every 15° for compasses marked only in degrees. (See Figure 6).

Theoretically there is no such thing as a perfect compass adjustment. In practice, 0, or no error, deviation cards are given by compass adjusters when this error is small enough to be neglected for all practical purposes. However, a card of no residual deviation errors may have little value unless the compass adjuster indicates the fair limit of accuracy of this adjustment work on such a card. (See Figure 5).

Pitfalls in Compass Adjusting

A few words of warning should be given before leaving the subject of compass adjustment. (See Figure 4). They are:

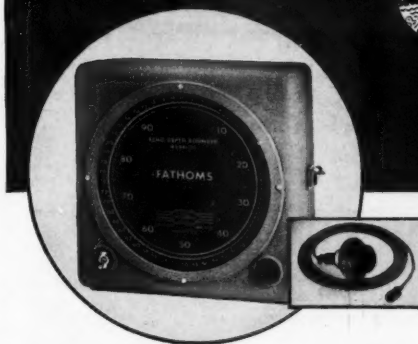
1. Semicircular correction magnets should not be placed too near the compass. It is better to use large correctors at a distance than small ones close up. Be careful not to place correction magnets, that point fore and aft, too near the spherical quadrantal correctors.

2. Especially when large corrections are to be made, it is a good idea to use semicircular correction magnets in pairs rather than singly. That is to say, use two magnets pointing fore and aft with one placed to port and one to starboard of the compass center; likewise, use two magnets pointing athwartship with one placed forward and one aft of the compass center.

3. Quadrantal correction spheres should not be placed too near the compass. For large errors, use large spheres at a distance rather than small spheres in close. Port and starboard spheres should be the same distance from the compass.

4. The vertical heeling magnet, in spite of all that can be done, is a bad actor. In going from one magnetic latitude to another, this heeling error corrector usually has to be readjusted to keep the compass card from swinging when the ship rolls in a sea. The skipper can make this adjustment himself, by hauling the heeling magnet up or letting it down until a point is found where the compass card steadies down. Should the vessel cross the magnetic equator, the heeling magnet should be taken out and turned end for end.

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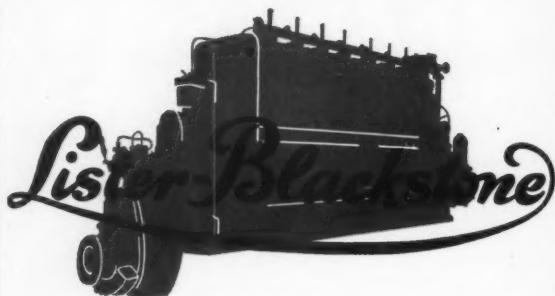
- Long, easy-to-read scale (approximately 30")
- Scale calibrated to 100 fathoms, yet can show much greater depths
- Special electronic gate circuit to increase readability over entire usable range
- All parts are standard, obtainable anywhere
- Complete replacement kit costs but a few dollars
- Equipment is rugged, built to stand up under heaviest weather conditions
- Unit is simple to install, having only one transducer and single compact indicator unit with internal power supply



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The 121' x 28' x 13' steel tuna clipper "Sea Magic" in a sideways launching from the ways of Avondale Marine Ways, Inc., New Orleans, La. She will be skippered by co-owner Capt. Manuel A. Fernandes of San Diego, Cal., and will be equipped with a 900 hp., 12-cylinder General Motors Diesel with 2.5:1 reduction, an 84" wheel on a Monel tail shaft, and two 75 kw. Superior-Diesel-driven generators. The interiors of her 13 brine and bait tanks, which have a capacity of 224 tons of frozen tuna, have been sprayed with zinc to resist corrosion for 15 yrs.

East Coast Clam Survey

(Continued from page 15)

and requested the Woods Hole Institution to conduct a series of investigations on propagation and growing of soft-shell clams. A seven-acre plot, adjacent to the leases, was set aside for experimental purposes.

Two methods of populating barren areas appeared promising. The first involved transplantation of contaminated stocks which could be obtained from polluted areas at a reduced price. It was found that transplantation could be satisfactorily effected by simply broadcasting the clams on untreated flats, and the majority of the clams would dig in and establish themselves.

The second method involved treatment of the surface to induce setting. There were a few records of intense sets which occurred on new flats created as a result of dredging operations. A former clam grower also claimed that he induced setting by resurfacing his flat with sediments taken from a special thatch island.

Several test plots were resurfaced with a variety of materials and it was found that setting occurred on most of them. The most satisfactory soils were composed of very fine sediments which also contained roots and other fibrous material. Certain soils would induce setting but lacked physical properties to withstand Winter storms and ice. It has not been determined as yet how these new sediments induce setting, but the matter is under investigation.

The problem of predators turned out to be much more serious than had been expected. It was known that certain crabs, crab-like organisms, and boring snails subsisted on soft clams but there was very little information as to how much damage these organisms actually did.

During the Spring of 1948, severe losses occurred in the stocks which had been experimentally transplanted, and careful observations indicated that the common horseshoe crab was the responsible predator. It was finally determined that a large horseshoe crab could probably destroy as much as a square foot of well populated flat per day. Since horseshoe crabs were very numerous it became apparent that clam farming could not possibly be successful until methods of protecting beds could be devised. The problem of horseshoe crab control is now under investigation.

The great range of hard-shell clams, from New England to Florida, and the variety of conditions under which it exists makes the selection of sites for research very difficult. Co-operative studies with State Conservation Departments and universities are planned to utilize existing research facilities as much as possible.

Reproduction Research

The extensive hard-shell clam fishery of New Jersey, plus the research project of Dr. Thurlow Nelson and his group at Rutgers University, present many opportunities for joint studies. A cooperative agreement has been established between Rutgers University and the Fish & Wildlife Service to facilitate research on quahaugs in that State. This Summer, two graduate students are working with Dr. Nelson's group on certain phases of the problem. One man is trying to develop methods of obtaining seed quahaugs from natural reproduction. The other graduate student is investigating the basic problem of identifying the organisms used as food by hard-shell clams in New Jersey waters. This information is necessary for a complete understanding of the growth rates in different areas.

A preliminary survey of the clam fisheries of North Carolina was made during February. Plans have been made to base southern clam research at the Beaufort laboratory of the Fish & Wildlife Service. A fairly good clam industry is located in the vicinity of Beaufort and a great variety of environment conditions are to be found.

Fundamental studies of the rate of growth, age at maturity, and salinity tolerance, as well as development of practical methods for increasing and managing the fishery will be conducted here. It may be possible to develop methods of commercial clam farming near Beaufort which will be applicable to the southern part of the Atlantic Coast.

The quahaug fishery of Connecticut is small but might be expanded by farming in connection with the oyster industry in Long Island Sound. No field work is anticipated here at present but funds have been allocated to Dr. V. L. Loosanoff at the Fish & Wildlife Service shellfish laboratory at Milford, Conn. to develop methods of artificial propagation. This work will explore the possibility of producing seed clams in hatcheries while the field units in Rhode Island and New Jersey investigate seed production from natural spawning and setting.

The Milford laboratory already has found a method of artificially producing quahaugs to the setting stage. The method is simple, consisting in a gradual increase in the temperature of the water in which the clams are kept. The quahaugs can be made ripe in as short a time as seven days. Numerous cultures of eggs obtained from spawning quahaugs in the Winter were grown to the setting stage. The setting usually occurred in about 12 days. Experiments showed that quahaug larvae are not too selective in their food and will survive and grow on different diets composed of various micro-organisms.

By following the method developed at Milford, mature sperm and eggs can be obtained from quahaugs on almost a year-round basis. As far as research work is concerned, it is possible now to accomplish in one year as much as could previously be accomplished in three or four.

Hand vs. Power Harvesting

An intensive quahaug fishery by tonging, raking and power dredging methods is located in Rhode Island. Tonging is conducted the year round in every clean part of Narragansett Bay by about 1300 tongers. Power dredging is permitted only in part of the Sakonnet River from December 1 to March 31 and supports less than 35 boats. A serious controversy has developed over the relative merits of these two methods and the Fish & Wildlife Service has been asked by the industry and the State Conservation Department to settle it. Dredgers want additional beds which are too deep for hand tongers opened for the use of power dredges.

Two biologists are now stationed at Wickford, R. I., and have just completed a survey of the quahaug population throughout the Bay in cooperation with the Narragansett Marine Laboratory of Rhode Island State College. This information will be used to select a representative area for experiments to test the effect of hand vs. power methods on adult clams, juvenile clams, setting, and related bottom forms such as fish and scallops.

Seed production from natural spawning will be investigated by the Rhode Island unit as a beginning of quahaug farming studies. Although clam farming is not permitted in Rhode Island at present, the methods developed should apply in other places.

A management study area also is planned for Narragansett Bay. One part of the Bay which supports a small fishery will be observed and records will be kept of actual catch. Methods similar to those described for the soft-shell clam studies in Maine will be used to arrive at an estimate of the sustained yield.

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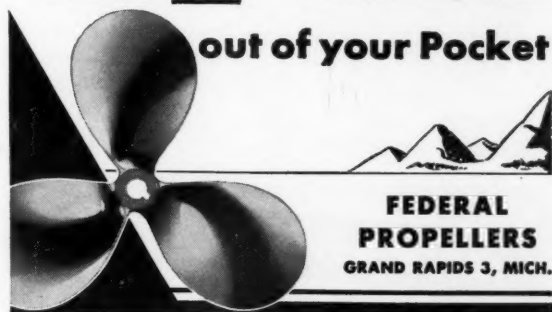
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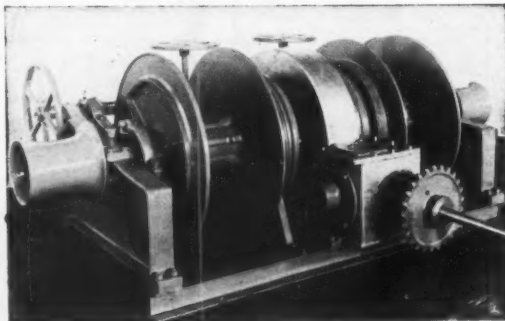
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Florida Allowed to Regulate Oystering on Leased Beds

The State Board of Conservation may regulate taking of oysters from leased beds, according to a July 8 ruling by Attorney General Richard Ervin. Though there is no specific law authorizing the Board to regulate leased beds, it has the right to adopt rules and regulations not in conflict with established statutes, Ervin declared.

He added that he was of the opinion that the State Board of Conservation, upon investigation and determination of a necessity therefor in order to conserve the supply of oysters in the salt waters of the State, could by rule or regulation fix the size of oysters that might be taken from the salt waters of the State.

Shrimpers Expect Navy Cooperation

The National Fisheries Institute, Washington, D. C., has pointed out to the Secretary of the Navy that winter shrimping in the Banana River, Cape Canaveral area of Florida, may be jeopardized by the Navy's proposals to experiment with guided missiles at the new Banana River Base. According to Ralph P. Fancher, executive secretary of the Atlantic Seafood Producers, Inc., representing about 300 fishing boats, the best shrimping on the East Coast takes place in this area from September 15 to March 15.

It is believed that by a cooperative program, fishing may continue without curtailing any plans the Navy may have to use the base for launching guided missiles.

Sponge Import Investigation Denied

The application of the Sponge Industry Welfare Committee, the Chamber of Commerce, the Board of City Commissioners and the Greek Community, all of Tarpon Springs, for an investigation into the importation of sponges to ascertain whether or not they are causing or threaten serious injury to domestic producers, has been denied by the Tariff Commission. The Commission divided by a vote of 3 to 3 on motion to order an investigation under the "escape clause" of trade agreements, and, accordingly, the application was dismissed.

Objectives of Oyster Laboratory

Dr. Philip A. Butler, chief of the Service's Gulf Oyster Investigations, Pensacola, reports that experiences of the past few months have helped to select certain broad objectives for the future program of the laboratory.

These goals include: (1) investigation of the drill in an effort to obtain more effective control; (2) studies on certain parasites of oysters, such as clams and sponges, to determine their economic importance; (3) determination of local setting and growing rates in conjunction with physical and hydrographic surveys in order



The 48' shrimper "Mary M" owned by John Marinzulich of St. Augustine, Fla. She is equipped with a 77 hp. Caterpillar D8800 Diesel with 2:1 reverse reduction gears, Columbian propeller, Fish Net & Twine Co. nets and Columbian rope.

to rehabilitate oyster reefs; (4) studies on creating selective strains; (5) continued studies in the area affected by the Bonne Carre Spillway to localize the hydrographic factors responsible for mortalities and low growth rates.

Sponge Sales Show Increase

The sponge industry at Tarpon Springs is making a slow but determined comeback from the slump of last year, according to auction sales' reports July 7 by the Tarpon Springs Sponge Exchange.

Sales so far this year total \$381,620, an increase of \$16,743 over the same period in 1948. During 1947, however, sales at this time had reached the \$1,021,075 mark.

Mullet Running at St. Augustine

The first substantial mullet run of the year took place the latter part of July on St. Augustine beaches, but roe mullet will not appear until Fall. The few fishermen who cast their nets during the month did well.

Miami Fishing Ban Declared Illegal

The proposed ban by the City of Miami on commercial fishing within corporate limits has been declared illegal by T. Paine Kelley, assistant to Richard Ervin, the State Attorney General. Kelley stated that the Supreme Court of Florida, in two decisions rendered upon the question presented, definitely decided that the general police powers granted to a city by its charter do not authorize it to regulate the taking of fish from the water, whether they be of fresh or salt water.

Menhaden Catch Above Average

Menhaden, commonly known as porgy, is Florida's top non-food fish, the research and industrial division of the Florida State Chamber of Commerce has reported.

Last year's catch of 100,344,248 lbs. stood above the 95,193,000 lb. average of the 10-year period 1938-1947. The 1948 catch was previously reported by a State agency as 892,303,457 lbs. but a recent check shows this figure referred to number of fish, not pounds.

Florida plants manufacturing menhaden meal and oil are located at Apalachicola, Fernandina and Mayport, and virtually the entire catch is brought in at these three points.

Closed Shrimp Seasons

Shrimping in the Apalachicola Bay closed on July 1, and the opening of the season was to be determined by seven citizens, including two experienced fishermen, two shrimp dealers, two businessmen not connected with the seafood industry, and the Chief conservation agent. Size and amount of shrimp in the Bay was to determine the opening.

Pinellas County does not come under provisions of a Hillsborough County act that permits year-round taking of shrimp for bait purposes, according to a recent announcement by Rep. Charles J. Schuh, Jr. As first offered, Pinellas was included in provisions of the Hillsborough bill, passed at the last session of the legislature. However, residents of Pinellas County objected, and it was amended out of the act.

Pinellas County remains under provisions of the 1947 act which closed the season on shrimp between Feb. 1 and April 1, and again between Aug. 1 and Oct. 1.

Georgia Schools Serve More Fish

A study by the Fish & Wildlife Service of the School Lunch Program which has been in effect in Georgia for the past seven months indicates that in an area composed of 12 counties, consumption of fish in the schools increased 100%. Also the frequency of servings increased to the point where 18% more schools were serving fish two or more times a month; 12% were serving three or more times; and 13% were serving four or more times.

Where 62 schools had indicated that fish was not used at all during the Fall of 1948, all but 14 of the schools were using fish one or more times per month as a result of the demonstrations given by F&WS home economists and personnel in that area.

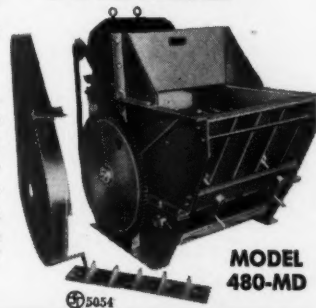


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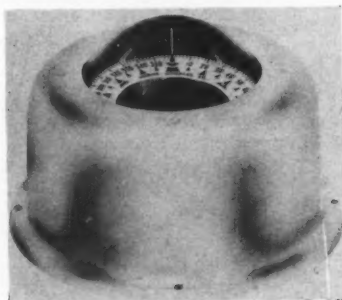
4 Fish Pier, Boston, Mass.

Edward W. Shattuck, President

Equipment and Supply Trade News

Additional information, and copies of catalogs and booklets mentioned, may be obtained on request from the addresses listed in the items or by writing Atlantic Fisherman, Goffstown, N. H.

Cruise Master Compass Has Stability



Cruise Master 4" Compass.

The Cruise Master 4" spherical compass, made by Marine Compass Co., Pembroke, Mass., for 20' to 60' boats, features stability under all conditions. A special spherical design of bowl, plus a reduced-size card, is said to make this possible. The small card is magnified by a plexiglass dome top so that it is read as easily as a 6" compass.

The liquid inside remains steady as the compass rolls and turns, according to the manufacturer. Since the card is in the center of the liquid, the most nearly static part, any erratic movement is minimized. Stability is further assured, it is claimed, through the absence of a binnacle, and by permitting an unusual angle of tilt to the card, thereby eliminating the need for a gimbal ring.

The Cruise Master has special indirect lighting, which gives a soft glow over the card and lubberline without glare or reflection. A standard lamp is used and can be replaced easily. Special means have been provided for the owner to adjust the compass. The built-in compensator will correct for about 25° of deviation. The Cruise Master is available with chrome, black crackle or enamel finish.

Other navigational instruments manufactured by Marine Compass Co. include flat top or dory-type compasses in 2" to 6" models, course protractors, and peloruses.

Brownell Announces New Nylon Nets

Nylock fish nets, made of specially processed, 100% nylon, have been developed by Heminway & Bartlett Mfg. Co., and Brownell & Co., Inc., Moodus, Conn.

Said to offer many advantages, Nylock does not need to be dried, eliminating the necessity for three sets of nets per vessel. It will not mildew, nor is it affected by marine organisms, gasoline or oil. It is a third lighter than a linen net of equal strength and half again lighter than cotton, while its wet weight is still less, comparatively.

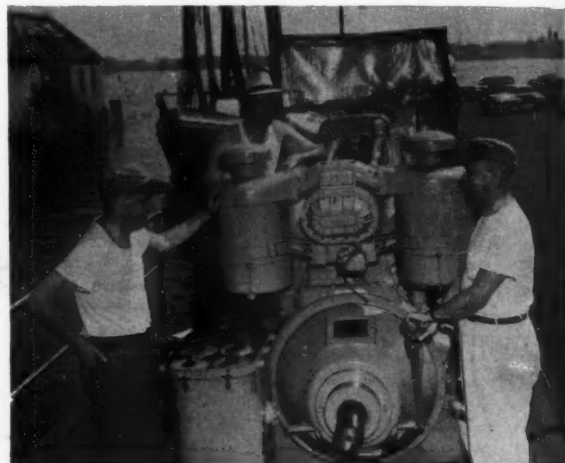
Through the nylon research of Heminway & Bartlett and Brownell's knowledge of netting needs, such problems as knot slippage, stretch, tensile strength and minimizing the effect of the sun have been overcome. Claimed to be contributing fac-



Nylock gill netting, made of nylon by Brownell & Co., Inc.

tors to better catches are Nylock's greater fineness, abrasive qualities and high tensile strength at the knots.

During a test conducted by Brownell and Heminway in June aboard a commercial fishing vessel on Lake Erie, nets three miles long were strung out. While it is customary for one man to hold a hand net under the fish coming aboard to catch those that shake loose, this was unnecessary with Nylock. After the first haul was made, the same Nylock nets were set again before the vessel returned to port. Hauls ranged from 1100 to 2000 lbs. of 2½ to 6-lb. whitefish per set, big catches for that time of year.



The new 400 hp., D397 Caterpillar Diesel on display at New Bedford. Shown from left to right are Frank McNamara, northeastern district representative, Caterpillar Tractor Co.; Sidney Rideout, marine sales representative, Perkins-Eaton Machinery Co.; and Wm. F. McNary, northeastern marine representative for Caterpillar.

New 400 Hp. Caterpillar Diesel Shown

The new Model D397, 12 cylinder Caterpillar marine Diesel was exhibited at Pier 4, New Bedford, Mass., on July 29 and 30 by Perkins-Eaton Machinery Co. of Boston. The engine has a continuous duty rating of 400 hp. at 1200 rpm., and is fitted with a Roots Gear-driven blower and Falk air-operated reversing gear and clutch.

The demonstration was held in connection with an extended tour sponsored by the Caterpillar Tractor Co., who are sending the engine by truck to various localities.

The engine already has been exhibited at Gulf of Mexico and South Atlantic ports, and previous to arriving at New Bedford, was displayed at the Mineola, Long Island, New York City and Newington, Conn., branches of H. O. Penn Machinery Co. Perkins-Eaton later showed the engine at Boston and Gloucester, Mass.

In addition to the complete engine, the Caterpillar truck carried a display of engine components, including a pre-combustion chamber, section of the crankshaft, injection valve, water pump, cylinder head, valve rotators, rod, piston, main and rod bearings and valve springs.

Double Seal Rings Eliminate Blow-By

Double Seal piston rings, manufactured by Double Seal Ring Co., Fort Worth, Tex., and distributed in New England by Atlantic Engine Supply, Inc., 491 Neponset Ave., Boston 22, Mass., are guaranteed to eliminate blow-by in both new and worn cylinders.

When blow-by is eliminated, an engine is not troubled with compression and power loss, excessive ring and cylinder wear,

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FOLLOW THE LINE OF *most* RESISTANCE

Reduction of operating efficiency, time lost in dry dock, delays and servicing expenses due to fouling and corrosion probably cost the marine industry more than any other maintenance factors. Don't risk needless losses — get dependable protection —

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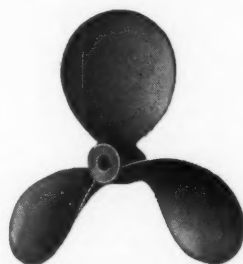


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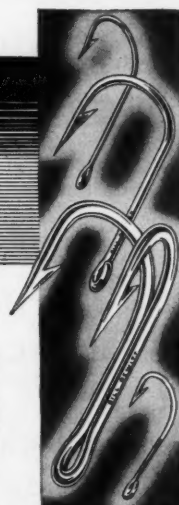
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(Continued from page 34)

high fuel and excessive lube oil consumption, excessive carbon formation and ring sticking, and frequent overhauls.

Conventional rings have a gap between the ends of the rings, through which blow-by escapes. Double Seal rings have no gap, thereby completely sealing pressure in the compression chamber of the cylinder. The gap is eliminated by the design of Double Seal rings, which incorporates an overlapping of the ring ends, thus providing a continuous seat against the cylinder walls and the groove of the piston.

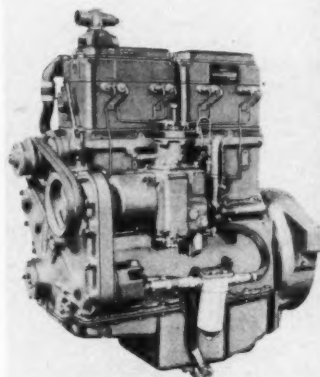
Double Seal rings are manufactured for both gasoline and Diesel engines. Rings of 1" to 20" diameter are lubricized, an improved chemical treatment process that provides an anti-friction, wear-resistant surface.

New Cummins Marine Diesel

A new four-cylinder, 5 $\frac{1}{4}$ x 6 Cummins Diesel engine with a maximum rated horsepower of 110 at 1800 rpm. has been placed in production by Cummins Engine Co., Inc., Columbus, Ind. The addition of this new, lightweight, compact, high-speed engine, designated the HRM/400, extends the line of Cummins Diesels to 72 models for all types of marine applications requiring from 50 to 550 hp.

Like all Cummins Diesels, the HRM/400 is a four-cycle engine, and uses the exclusive Cummins Fuel System.

It is equipped with standard, two-valve heads; a new, increased-flow lubricating system; continuous groove main bearings; standard HR liners and head gaskets; and it has a piston displacement of 495 cu. in.



New HRM-400 Cummins 110 hp. Diesel.

New C-O-Two Fire Extinguisher

A new C-O-Two dry-chemical-type fire extinguisher has been developed by C-O-Two Fire Equipment Co., P.O. Box 390, Newark, N. J. According to the manufacturer, it is quick acting with no syphon tubes or valves within the cylinder to become clogged or inoperative, the discharge nozzle and hose remain empty until extinguisher is actuated, and a special dry chemical formula has been developed to ensure proper flow.

Approved by Underwriters' Laboratories, Inc., the extinguisher comes in 20 and 30-lb. sizes, and can be recharged on the spot. The C-O-Two dry chemical is said to be free flowing, non-conducting, noncorrosive, nonfreezing, nontoxic, and highly effective on flammable liquid and electrical fires.

Robberson Made Fisher Distributor

Fisher Research Laboratory, Palo Alto, Calif., has appointed Robberson Marine Radio, 334 Main St., Pt. Washington, N. Y., East Coast distributor for its marine radio equipment.

The Fisher line includes several models of radiotelephone equipment, direction finders and receivers. In addition to broadcast reception, the receivers are fitted with crystal-controlled channels for reception in the ship-to-ship and ship-to-shore bands. The 10-watt, 4-channel Skipper radiotelephone incorporates high-efficiency circuits and broadcast reception in an attractively-designed, compact cabinet. A 25-watt version of the Skipper is also available; this set is of the same overall dimensions, but a separate power supply for the higher voltages needed is provided.

Walsh Joins Nordberg in Southeast

The appointment of Frank O. Walsh, Jr., as sales representative of the Heavy Machinery Division in the Southeastern Territory has been announced by R. W. Bayerlein, vice-president of

Nordberg Manufacturing Co., Milwaukee, Wis. Walsh has offices in the Volunteer Bldg., Atlanta, Georgia.

Walsh is a graduate of Georgia Tech and Cornell University. His Diesel engine experience, most of which was obtained in the southeastern states, includes 10 years with the former McIntosh & Seymour Division of American Locomotive Co., a year with De LaVergne Engine Co. and a year with Busch-Sulzer Bros. Diesel Engine Co., just prior to its merger with Nordberg.

Kilmer Named DeWitt Sales Manager

Nelse Kilmer has been appointed sales manager of the Bill DeWitt Division of the Shoe Form Co. Inc., Auburn, N. Y., according to an announcement by Frank P. DeWitt, president.

Kilmer first joined the organization as purchasing agent and has since spent 12 years in the Sales Department. When Frank DeWitt was elected president of the company to succeed the late W. J. (Bill) DeWitt, Kilmer was given responsibility for the promotion and sales of sports hooks and boxes, as well as commercial fish hooks.



Nelse Kilmer

Use of Genuine Parts Advised

The use of genuine replacement parts for engines and other equipment aboard fishing boats is urged by A. Jay Turk, president of Diesel Marine and Equipment Corp., of Hoboken, N. J.

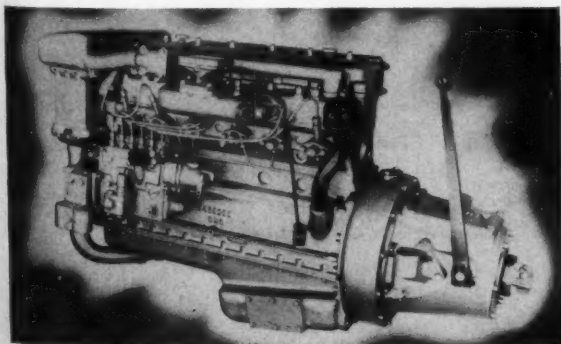
He points out that many fishermen who need repairs are buying at places which do not carry genuine parts. The operators of such places say they have products that are just as good, but the substitutes often do not prove serviceable. As a result, the fisherman finds he has spent his money unwisely, not only for the part but for the cost of installation. In addition, valuable fishing time is lost while the boat is tied up.

Low-Weight Flagship Marine Diesel

The Flagship Marine Diesel, new this year, is a 6-cylinder, 4-cycle, self-scavenging, 3 $\frac{1}{2}$ x 4 engine governed to 77 hp. at 2200 rpm. for continuous service. Weighing only 1245 lbs., it is mounted on 22 $\frac{1}{2}$ " centers.

The engine features overhead valves with dual valve springs, Bosch fuel system, a precombustion chamber, and a 12-volt standard electrical system with starter and generator mounted high. It is full-length jacketed for the fresh-water cooling system which is thermostatically controlled. The cross-flow heat exchanger, oil cooler and expansion tank are an integral unit.

Flywheel is on the drive and small enough not to interfere in tight installations. The crankshaft has seven main leaded bronze bearings which are forced-lubricated, and the exhaust manifold is single-piece cast iron, water jacketed with built-in accumulator tube and condensation traps. Electrolysis pencils are standard, and an oil preheater is available for cold weather.



The 6-cylinder, 4-cycle, 77 hp. Flagship Diesel.

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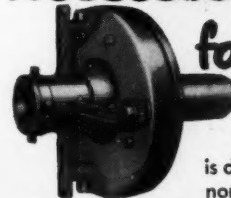
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Yes, sir, a reliable, trouble-free Caterpillar D13000 Engine powers the "J. L. Stanley & Sons", fishing out of Plymouth. With 115 Horse Power it throws a 41 x 33 wheel and is equipped with a Joes 2 to 1 reduction gear. Owner F. S. Savery knows by performance that Caterpillar engines are economical, dependable, powerful, and compact.

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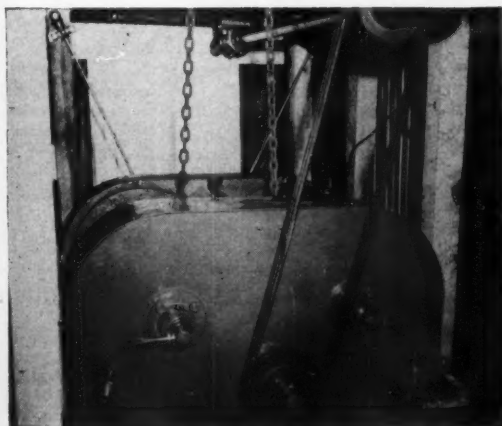
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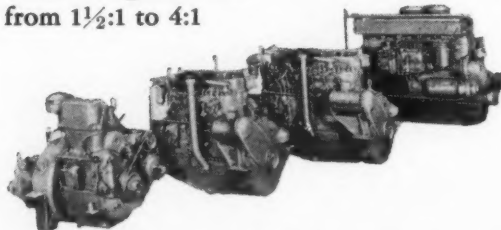


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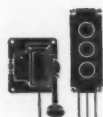


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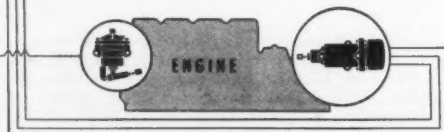
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(Continued from page 38)

Bright Star (3)	2,950	Marie & Katherine (3)	2,950
Camden (2)	2,000	Mary Canas (2)	1,600
Carol & Estelle (3)	3,000	Mary D'Eon (2)	1,700
Catherine & Mary (3)	3,000	Mary J. Landry (2)	1,190
Charles S. Ashley (3)	3,300	Mary Tapper (1)	900
Dagny (2)	2,000	Moonlight (3)	3,000
Doris & Gertrude (3)	3,000	Muriel & Russell (1)	1,000
Elizabeth N. (2)	2,200	Newfoundland (2)	1,900
Elva (1)	555	Olive M. Williams (2)	2,000
Eunice-Lilian (2)	1,800	Palestine (2)	2,200
Fairhaven (2)	2,200	Pearl Harbor (2)	2,200
Flamingo (3)	2,500	Pelican (2)	1,900
Fleet Wing (2)	2,000	Porpoise (2)	2,000
Four Sisters (2)	1,950	Ramona (2)	2,000
Francis J. Manta (2)	1,900	Red Start (3)	3,300
Friendship (3)	2,500	Richard Lance (2)	1,835
Gay Head (2)	2,200	St. Ann (3)	3,000
Idlewild II (1)	300	Shannon (2)	1,700
Irene & Mabel (2)	1,600	Smilyn (3)	2,400
Janet & Jean (3)	2,950	Sunapee (1)	1,000
Jerry & Jimmy (2)	2,200	The Friars (3)	3,000
Kingfisher (2)	2,000	Theresa A. (1)	900
Lainee K. (2)	1,800	Ursula M. Norton (3)	3,200
Liboria C. (2)	2,000	Venture I (2)	1,575
Linus S. Eldridge (3)	3,200	Victoria (1)	700
Louis A. Thebaud (2)	2,000	Virginia & Joan (1)	900
Lubenray (2)	1,800	Wm. D. Eldridge (3)	3,000
Magellan (2)	300	Wm. H. Killigrew (2)	2,100
Malene & Marie (3)	3,300	Wm. J. Landry (2)	2,000
Malvina B. (2)	2,200		

Swordfish Landings (Number of Fish)

Agda (1)	1	Louis A. Thebaud (1)	1
Bozo (1)	43	Mary Landry (1)	2
Christine & Dan (2)	151	Quest (1)	10
Diana Jane (3)	12	Rose Jarvis (4)	43
Fannie Parnell (2)	6	St. Anthony (4)	6
Fleet Wing (1)	1	Santina (2)	18
Gay Head (1)	1	Sonny & Joyce (2)	22
Grayling (2)	15	Southern Cross (1)	8
Idlewild II (2)	8	Two Brothers (Conn.) (2)	8
Jojarona (2)	13	Winifred M. (1)	2

BOSTON

Acme (7)	89,100	Margaret & Marie (5)	52,900
Addie Mae (7)	89,400	Maria Del Soccorso (7)	76,800
Adventure (L. Tr'ler) (3)	245,100	Maria Giuseppe (4)	11,100
Agatha & Patricia (3)	175,000	Marietta & Mary (3)	87,100
Albatross III (1)	8,700	Maris Stella (2)	160,300
Alphonso (8)	94,600	Marjorie (1)	7,600
Annie & Josie (7)	87,100	Marjorie Parker (2)	94,000
Arlington (2)	243,000	Marsala (1)	16,200
Atlantic (1)	112,200	Mary & Jennie (4)	51,800
Ave Maria (Dragger) (8)	111,700	Mayflower (2)	16,500
Bay (1)	72,000	Michigan (2)	80,500
Billow (1)	119,300	Michael G. (7)	280,800
Bonnie (3)	381,000	Nancy B. (4)	137,100
Breaker (2)	188,300	Neptune (2)	161,700
Breeze (2)	150,500	Nova Antonio (2)	7,900
Calm (2)	255,400	Ohio (2)	206,800
Cambridge (2)	213,600	Olympia (2)	54,700
Carmela Maria (Dragger) (3)	49,300	Olympia La Rosa (4)	157,500
Carmela Maria (L. Tr'ler) (4)	17,200	Pam Ann (1)	33,500
Catherine B. (Dragger) (4)	160,100	Phantom (1)	100,000
Catherine B. (L. Tr'ler) (5)	36,900	Pioneer (6)	74,800
Charlotte M. (2)	108,400	Plymouth (3)	247,900
Crest (2)	172,500	Princess (8)	112,900
Curlew (3)	35,100	Quincy (1)	82,500
Diana C. (7)	103,300	Racer (2)	186,700
Dorchester (1)	92,700	Red Jacket (2)	283,500
Drift (2)	239,800	Richard J. Nunan (1)	42,900
Eddie & Lulu M. (6)	55,600	Robert & Edwin (7)	76,200
Elizabeth B. (2)	137,800	Roma (7)	87,100
Esther M. (3)	221,100	Rosalie D. Morse (2)	134,800
Estrela (1)	92,300	Rosemarie (1)	15,500
Eva Martin (7)	63,200	Rose Mary (4)	49,000
Familia (3)	96,200	Rosie (7)	101,600
Fanny F. Hickey (4)	60,200	Rush (2)	150,200
Flying Cloud (3)	422,900	Sacred Heart (7)	78,000
4-C-688 (1)	2,500	St. Anna (5)	29,500
4-C-887 (1)	3,500	St. Francis (1)	4,600
4-E-885 (2)	2,900	St. Joseph (Dragger) (1)	37,000
4-G-370 (6)	24,800	St. Joseph (L. Tr'ler) (3)	14,400
4-G-673 (5)	12,800	St. Michael Angelo (5)	28,000
4-H-823 (5)	22,500	St. Theresa (4)	27,400
Francesca (7)	66,000	Salvatore & Grace (1)	26,800
Hazel B. (3)	183,300	San Antonio (3)	16,300
Hornet (6)	80,200	San Calogero (7)	97,900
J. B. Junior (2)	137,500	Santa Rita (6)	32,600
J. B. Junior II (5)	61,100	Santina D. (2)	18,700
Joe D'Ambrosio (7)	68,600	Savioia (2)	13,700
Josephine (4)	40,800	Sebastiano & Figli (6)	76,400
Josephine F. (4)	30,400	Six Brothers II (6)	16,100
Josephine P. (1)	41,300	Surge (1)	211,000
Josephine P. II (3)	99,400	Texas (1)	51,400
Josie M. (8)	103,000	Thomas Whalen (2)	210,500
Leonard & Nancy (1)	74,700	Triton (2)	180,500
Leonarda (6)	58,900	Two Pals (7)	81,100
Little Nancy (4)	109,300	Wave (2)	181,500
Lorine III (3)	113,100	Weymouth (1)	87,500
Louise (1)	53,500	Wm. J. O'Brien (2)	287,500
Lucky Star (2)	175,400	Winchester (1)	102,000
M. C. Ballard (1)	90,300	Winthrop (2)	154,300
Maine (1)	124,200		

Swordfish Landings (Number of Fish)

Evalina M. Goulart (1)	168	Marjorie Parker (1)	17
Evelyn G. Sears (1)	118	Mary M. (1)	72
Jorgina Silveira (1)	130	Rosemarie V. (1)	80
Lady of Good Voyage (1)	133		

Rhode Island Testing Effect Of Power Quahog Dredging

A major effort is in progress off the North Kingstown shore of Rhode Island to settle a perennial controversy as to whether or not mechanical dredging of quahogs is harmful. The power-boat quahog fishermen of Tiverton and elsewhere claim it is not, but the hand dredgers of East Greenwich, Wickford and other localities are of the opinion that mechanical dredging injures the bay bottom, depletes the quahog beds and damages other forms of valuable marine life.

In a two-acre plot marked by buoys, scientists of the Fish and Wildlife Service, working with the Narragansett Marine Biological Laboratory and the State Division of Fish and Game, have launched a controlled study of mechanical dredging vs. hand dredging. The plot, selected because conditions there are about average, is divided in half, and each half is further subdivided into four quadrants.

In one section, the *Lil-Joy*, owned and skippered by Capt. R. Earl Sutcliffe of Snug Harbor, who built her, is engaged in power dredging. The craft is working for the Narragansett laboratory, and also is accredited to the Fish & Wildlife Service.

Ernest Kitchen of Lafayette and John J. Nahlick of Hamilton, bull rakers, are working the other section. All the quahogs taken by both power dredging and bull raking are counted and measured.

When the bull rakers get to the point where they are taking less than \$5 worth of shellfish in a day, the plot will be considered worked out, and another one will be established. It is believed that this will occur by September. Next Summer the plot will be worked again to see to what degree the areas are replenished.

Warren Landers, Fish & Wildlife Service marine biologist, is director of the experiment.

Urge Sakonnet Harbor Improvements

At a hearing in the Little Compton Town Hall before U. S. Army Engineers eighteen Rhode Island residents and spokesmen from about a dozen other Rhode Island business and civic organizations strongly urged that the Federal government extend the Sakonnet Harbor breakwater 400 feet and dredge the harbor at least eight feet deeper.

The testimony strongly favored improving Sakonnet Harbor for the benefit of the Little Compton fishing industry and to furnish a storm haven for coastal shipping.

Henry Ise, chief of the harbors and rivers department of the Rhode Island Public Works Commission declared that the state "favors any project by the Corps of Engineers which would make Sakonnet Harbor a safe anchorage. Ise cited the 1938 hurricane and the 1947 gale winds which caused millions of dollars worth of damage to the fishing industry in lost boats and equipment. This could have been prevented, Ise said, if the breakwater had been extended to protect the mouth of the harbor from northwest gales.

Robert Snow, town moderator and secretary of the harbor improvement committee, said that more than 7,000,000 lbs. of fish are taken ashore at Little Compton each year, but with an improved harbor, the take and employment could be doubled.

Connecticut Laboratory May Get Boat

The Senate Appropriations Committee in reporting out the Interior Appropriation Bill included an item providing a contract authorization for up to \$50,000. This money would be for the Fish & Wildlife Service to contract for a suitable boat for following setting conditions, and other essential work, at the Milford, Connecticut, Oyster Research Laboratory. For years, the work at the Milford laboratory has been severely handicapped for lack of a suitable boat.

Oyster Acreage

According to the report of the Connecticut Shellfish Commissioners for the period July 1, 1946 to June 30, 1948, the total oyster ground acreage held under perpetual franchise or by lease, was over 54,619. This includes 45,836 acres held under perpetual franchise, 3,583 acres of State leases, and 5,200 acres of town grounds under State jurisdiction.

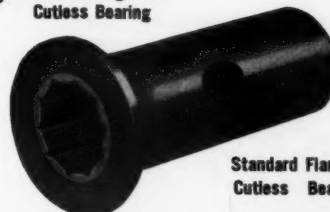
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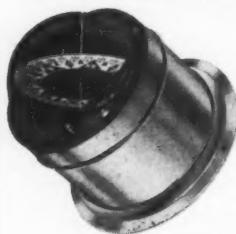
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Maryland Oyster Yield Shows Large Increase

A 25% increase in Maryland oyster production during the past season was announced Aug. 3 by the Maryland Tidewater Fisheries Department, which revealed that the State's waters yielded 2,702,814 bushels from September, 1948 to last April, as compared with 2,157,838 bushels in the 1947-48 season.

Most of the production came from tributaries of the once oyster-rich Chesapeake Bay. Good hauls in Tangier Sound and Eastern Bay and its branches were said to be mainly responsible for the jump in total production. "Three years ago there was almost nothing from Tangier Sound," a department spokesman said.

Exports of shell oysters increased at the same time that imports decreased. In 1948-49 some 182,459 bushels were shipped out of the State, the Department reported. In the preceding season 78,665 bushels were exported. Imports declined from 430,791 bushels to 361,391.

Total production surpassed the average of 2,500,000 bushels pulled up for several years before the 1947-48 slump.

New Equipment Aids Shell Planting

Ralph Hammer, Shellfish Culturist of the Department of Tidewater Fisheries, reports that the State shell planting crew has been moving shells in the Chesapeake Bay at the rate of 15,000 bushels per day with the use of an oyster shell loader and conveyor recently acquired by the Department. This is roughly four times faster than the old hand-loading system.

According to Hammer the new equipment assures absolute measure and eliminates the disputes that occasionally arose when wheelbarrow measure was used.

The boats that transport the shells have also been improved by the addition of equipment for washing shells overboard. The washing action is not only more efficient, but it cleans the shell, providing a better surface for the attachment of young oysters.

Catches of Blues Large

Several fishing boat captains reported good catches of blues during the latter part of July. Capt. Bill Thomas of the boat *Hilda Mae* reported large catches of blues while trolling. On July 24 Capt. Thomas landed 88 of the fighting fish and July 25 he returned with 118. July 27 he reported catching 60, plus 50 trout.

Soft Crab Prices High

During the latter part of July soft crabs increased in size, the catch was good and there was a sufficient supply to meet the demand. Prices continued high.

Cousin to 'Red Tide' Found

Tiny sea animals, cousins to Florida's fish-destroying "Red Tide", have been found in Chesapeake Bay, Maryland State chemists report.

The minute bodies are similar to those which in 1945 killed millions of fish in Florida's Gulf waters. Paul W. McKee, executive secretary of the Maryland Water Pollution Control Commission, however, emphasized that the microscopic creatures are "not the same" as those in Florida, adding "we hope in this case we will not experience any considerable mortality."

Capt. Clarence Crockett

Capt. Clarence Crockett died in Crisfield July 14. Born in Crisfield, "Planner" Crockett, as he was best known on the water courses, early in life took to the water. He was a crabber and oysterman, and later, as owner and operator of power boats, freighted oysters and crabs from various parts of the Bay to Crisfield packers.

Asked to Investigate Power Dredging

An invitation has been extended to the Legislative Council to visit the lower Bay area and see first hand the conditions that obtain there with special reference to the problem of taking oysters by means of power dredging as over and against the present methods of hand operation. A Bill, intended to legalize power dredging in the Bay south of Cedar Point and Barren Island was defeated in the last Session.

North Carolina Seafood Production Gains

During the month of June, the fish and shellfish catch in the Atlantic, Beaufort and Morehead area of North Carolina amounted to 348,000 lbs., which represented an increase of 40,000 lbs. over the May yield. The landings included 153,000 lbs. of shrimp and 195,000 lbs. of finfish. Croaker was in top position with a catch which totalled 62,000 lbs., trailed by spot, with 47,000 lbs., and sea trout, gray, with 30,000 lbs. Production for the first six months of this year was 2,155,000 lbs.

Capt. John A. Nelson, fisheries Commissioner, told the Board of Conservation and Development that a record was set in shrimping for the year ending June 30, 1949. The State produced 7,219,667 lbs. in 1948-49 as against 4,264,883 lbs. last year (heads on).

There were more menhaden boats fishing last fall than ever before, the Commissioner reported. Approximately 60 boats fished out of Beaufort inlet, including the non-resident boats chartered by resident menhaden plants.

There was an increase in oyster production, but a drop in the market for hard and softshell crabs, and clams. "We produced 171,666 tubs of oysters as against 153,740 tubs last year, or a gain of 17,926 tubs. — We produced 30,666 dozen soft crabs as against 36,812 dozen last year. The catch of hard crabs this year was 2,183,710 lbs. as against 4,102,470 lbs. last year. We produced 20,806 bushels of clams this year as against 24,473 bushels last year. There were as many crabs and clams as ever before but we had less market for them."

Complete Shrimp Survey

The North Carolina shrimp survey was completed the second week of July and the survey boat, *Penny*, owned by Captain Merritt Moore of Southport, returned to Southport from Morehead City to resume its regular work of shrimping.

The work has been underway since the first of the year and consisted mainly of dragging, sounding and the use of try nets for the purpose of locating bottoms where shrimp are to be found, and which are of such a nature that trawls can be used

Shark Repellant Being Tried

A shark repellant, similar to that used in the shark infested waters of the Pacific during the war to protect American troops, is being tested by W. S. Wells of Southport. Ten of his boats are using it on their nets to determine if it will keep away sharks, which have been especially destructive to the nets of North Carolina fishermen this Summer.

"Mispillion" a Fire Loss

W. H. Potter of Beaufort Fisheries, Beaufort, reported that \$50,000 damage was caused to the *Mispillion* by fire on July 20, four miles off Atlantic Beach.

Capt. Brady Wade ordered his men to abandon ship when it was seen that they could not battle the spreading flames and that fuel tanks were in danger of exploding.

The 100,000 fish aboard were saved. They remained in the hold and were removed from the boat when it was towed to the plant's pier by the W. A. Mace.

Croatian Packing Opens Wanchese Plant

Operations are underway in the new shrimp cannery of Croatian Packing Corp. at Wanchese, N. C., of which Henry B. Albert is president. The firm has facilities for packing a cooked, peeled and de-veined fresh frozen shrimp in a vacuum packed can.

The Company has a freezing plant and plans to operate the cannery on a 12 months' basis, with a year's supply of raw shrimp being caught, frozen and stored during the 4 months' shrimp season.

The entire catch of a considerable number of local boats has been contracted for, and in addition, the Company is operating three of its own boats. Fish not needed for canning will be sold in green form. Canning activities will be devoted particularly to Pamlico Sound brown shrimp, which will be sold under the "Kitty Hawk" brand.

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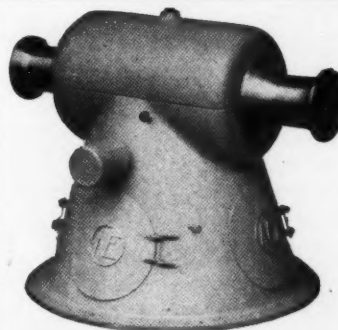


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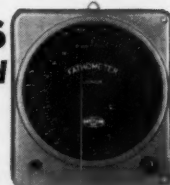
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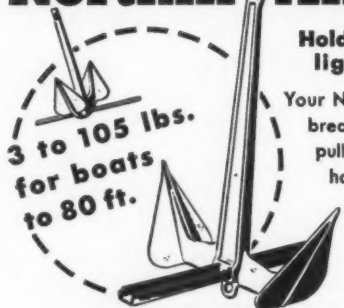
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New Brunswick Report

By C. A. Dixon

Following a trying period of disappointment, speculation and discouragement which lasted from the beginning of 1949 until the waning latter half of July, the Summer school of sardine herring appeared in Southern New Brunswick. Intermittent catches of varying sizes, some of them quite satisfactory, were made by weirmen along the shore of the Charlotte County mainland from L'Etete to Lepreau and at Deer Island in the Irish Channel region and nearby. The largest single catch was made in the "Catnap" when 81 hogsheads were taken out in one day—a surprise for the weirmen, boatmen and factorymen. This catch indicated the presence of a sizable school of fish in the offing and it was followed by lesser but substantial yields from a few of the weirs in the Channel.

At the time of writing, as August enters the picture, sardine herring are reported to be more abundant offshore and they even school within a short distance of the mouths of the sardine weirs; but they are not yet ready to enter the traps. The herring have been larger in size in many places than they were last year, and the excellent quality of the fish will ensure the packing of a superior grade of sardines on both sides of the border.

Mayhew Discusses Federal Fisheries Aid

A series of "man-to-man talks" on subjects vital to the interests of the fishermen of Quebec, the Maritime Provinces and Newfoundland was given during the latter part of July by Federal Fisheries Minister Mayhew. The talks embraced the following: 1. a program of inspection to ensure high quality both for local and export markets, 2. assistance to fishermen by providing boats and gear to maintain maximum production, 3. capital assistance to improve and expand the industry, 4. taking joint action with railways to provide new refrigeration cars for transporting fish across the country, 5. a sales and advertising campaign to help the industry sell its products, 6. better refrigeration service at market centers.

Mackerel Raid Sardine Herring Weirs

During July hordes of tinker mackerel and some of the larger size swarmed into the Bay of Fundy and raided the sardine herring weirs in Charlotte County, driving the herring hither and yon. The mackerel are considered a menace by the weir fishermen who claim they break up the herring schools and sometimes cause valuable catches impounded in weirs to be lost or very materially depleted. Some of the weirmen in Charlotte County were able to capitalize on the mackerel threat by seining what mackerel came into their weirs and selling them to a factory in Lubec, Me. At first \$20 a hogshead was paid for the mackerel but later the price dropped to \$10. One weir in Mascarene caught many tons of the fish in a single seining. Others took from ten to twenty hogsheads at a time.

In one instance a weirman benefited from the mackerel raid, for it is said they were responsible for driving 80 hogsheads of sardine herring into his weir at Bain's Island near Lord's Cove, N. B. and made the weir crew richer by approximately \$2,000 between morning and noon, including the money received for the herring scales.

Groundfishermen Doing Well

Southern New Brunswick groundfishermen have done very well this Summer, although catches in July petered out to some extent on certain fishing grounds. The fishermen received 4c a pound for their pollock sold in Eastport, Me., and the price for haddock remained at 6c a pound during the month. There have been a lot of pollock schooling on the surface of the water in the Quoddy region of Charlotte County and purse seiners from Wilson's Beach made some very good hauls. Handline fishermen also did well some days. More boats have been engaged in pollock fishing this year due to the failure or near failure of the sardine herring fishing during the early part of the Summer.

Vineyard Bailings

By J. C. Allen

The fade-out of July into the wake of time leaves your correspondent with the thought that we are experiencing a Summer of the variety that old-timers talked about, and of which they spoke with enthusiasm. This is no burst of optimism, because, for the record, our New England fleet was not prepared for it; but the facts, laid end to end, add up to just exactly what we say.

The oldest trap-fisherman in active operation said this: that in one haul, he saw more mackerel in his gear than he had ever before seen in a trap-bowl. Mackerel have run mixed and small, with only a moderate percentage of the large fish, but they have been, and still are, plentiful.

Old-timers of fifty years ago would have said this, we know: "They are likely to continue to run in this manner clear up to cool weather unless the bluefish or squiteague strike on, and drive them. And if that should take place, then those other fish will replace the mackerel." That was the older rule and it still operates.

Swordfish Running Good

The start of the swordfish season was auspicious to say the least. Local craft made killings; even the small boats have taken them in unusual numbers. We would not say, offhand, that the swords are running to unusual size or weight; but they are a good, average run, and apparently, up to the end of the month, they were not wild or difficult.

Now this is an old-fashioned condition which might have occurred in any season within the past half-century and probably longer. And it is equally true that if it had occurred, it would have found a big fleet all ready to stand offshore and chop the ocean into furrows with their keels. It would not do to talk of fortunes to be made at it, because our records of twenty-five years ago quote cap-log prices on sword in July at twenty-five cents. Still, it was a paying proposition then, and is still a paying proposition.

But the thing that happened is just one of those damned things! The first of the fleet ran offshore before the beginning of the month, and the veterans in the gang swore that they had never seen swordfish so plentiful in their lives. But they checked the fleet on Southeastern Georges and counted sixty-odd vessels, of which, for crapes sake, only six were American vessels; the rest were from Nova Scotia!

That's why we say that our gang was not prepared for this kind of a Summer. True, there have been some to fit out since they heard of conditions, but in other years they would have been out there to see for themselves.

We understand why they weren't there. Sword have been scarce for some years. The vessels that prospected for them didn't make a paying season, so the skippers and crews said "to hell with it!" But this same bunch, which have stuck to otter-trawling like grim death hangs to a dead dog, are not doing so darned well at that. Some will still argue that if everyone goes after sword, the bottom will drop out of the market, to which we can only say: "Maybe!" Because if the Powers that Be expected to see sword a drug on the market, nobody would have imported 'em, or would they?

Groundfish Scarce, Menhaden Abundant

We have checked and rechecked on the striped bass situation which we sincerely believe is the result of nature balancing the budget, so to speak. In spite of all the arguments, we still believe that the ban on net fishing in some States is unwarranted, and that, in the long run, it will fail to pay a dividend.

What we are leading up to is simply this. There is a scarcity of groundfish, which is widely recognized. But the menhaden are schooling as thickly as ever in history, with God knows how many varieties of other fish chasing them. Hardly anyone is making a business of taking these fish, either because they are prohibited, they are rigged expensively for otter-trawling, or because they don't know how and are afraid to take a chance. Instead they keep on scraping the bottom, with only moderate luck, and yell their heads off about subsidies, tariffs, scarcities and bloody murder.

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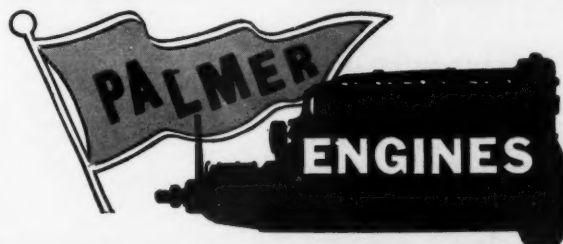
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The Maxim Silencer Co., 65 Homestead Ave., Hartford, Conn.
*Northill Co., Inc., Los Angeles 45, Calif.

BATTERIES, STORAGE

- "Exide": Electric Storage Battery Co., Allegheny Ave. and 19th St., Philadelphia, Pa.
*Surrette Storage Battery Co., Salem, Mass.
*Willard Storage Battery Co., Cleveland, Ohio.

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- Continental Can Co., 100 E. 42nd St., New York, N. Y.

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- *Kelvin & Wilfrid O. White Co., 90 State St., Boston, Mass.
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- *Bendix Aviation Corp., Pacific Div., 475 Fifth Ave., New York 17, N. Y.
Bludworth Marine, 100 Gold St., New York 7, N. Y.
*Kaar Engineering Co., Palo Alto, Calif.
Pilot Marine Corp., 39 Broadway, New York 6, N. Y.
*Submarine Signal Co., 160 State St., Boston, Mass.

DIESEL AUXILIARY SETS

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*Lister-Blackstone Inc., 420 Lexington Ave., New York 17, N. Y.
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Universal Motor Co., 436 Universal Drive, Oshkosh, Wis.
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*Enterprise Engine & Foundry Co., 18th and Florida Sts., San Francisco 10, Calif.
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*Kermath Manufacturing Co., 5896 Commonwealth Ave., Detroit 8, Mich.

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*Lister-Blackstone Inc., 420 Lexington Ave., New York 17, N. Y.

*Murphy Diesel Co., 5317 West Burnham St., Milwaukee, Wis.

*Nordberg Mfg. Co., Milwaukee, Wis.

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R. H. Sheppard Co., Inc., 30 Middle St., Hanover, Pa.

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ENGINE DEALERS

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Radiomarine Corp. of America, 75 Varick St., New York 13, N. Y.
*Sargent, Lord & Co., 42 Portland Pier, Portland, Me.
*Submarine Signal Co., 160 State St., Boston, Mass.

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 Hudson American Corp., 25 West 43rd St., New York 18, N. Y.
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 Luders Marine Construction Co., Stamford, Conn.
 Newbert & Wallace, Thomaston, Maine.
 *Frank L. Sample, Jr., Inc., Boothbay Harbor, Me.
 Southwest Boat Corp., Southwest Harbor, Me.
 Webber's Cove Boat Yard, East Blue Hill, Me.

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"Albatross III" Cruises

(Continued from page 19)

challenge them to larger craft, longer trips and bigger catches.

Haddock Tagged

On completion of the North Carolina survey, the *Albatross III* returned to Woods Hole, Mass. to resume her research and exploratory work on the fishing grounds off New England.

Over 1,200 haddock were tagged on Georges and Browns Banks during a one-week trip ending June 29. This is the first large-scale haddock tagging operation accomplished on any of the important offshore banks. The purpose of this work was twofold: first, to determine whether haddock which pass through the meshes of the recommended large-mesh cod end will actually survive to a more marketable size; second, to learn more about where fish on these banks migrate.

The fish were tagged by attaching two celluloid discs, one red and one white, to the left gill cover. The white discs were numbered serially so that each fish has a registration number. The length of the fish was measured and his physical condition noted.

Data from these tagging experiments will enable the scientists to determine the practicability of using nets with larger mesh to save many small fish and to study the movements of the haddock over the banks and between the banks.

Census Studies

Later studies were made to determine the number and size of all marketable kinds of fish that would escape through meshes 1" to 1-1/2" larger than the mesh in present use. The *Albatross III* made alternate tows, first with a net of regular commercial mesh and then with a net of the larger mesh. Observations were made on various parts of George Bank and in the South Channel area. The data collected are now being analyzed to determine the percentage of each size of fish that escape and to relate these to the commercially-acceptable sizes and weights.

On her most recent cruise, the complete trip of the *Albatross III* was devoted to a census of the groundfish populations on Georges Bank. Sample tows were planned at stations spaced over all of this area in depths up to 150 fathoms. A modified commercial trawl was to be used for this census. Counts of all fish of each species at each station were scheduled as well as measurements of commercially-important species. Scale samples were to be taken from haddock for age and growth determinations. In addition, time permitting, it was planned to tag haddock and yellowtail flounders for migratory studies.

It is expected that this census of Georges Bank will provide data on the relative numbers of fish of each species on all of Georges Bank and of changes in these numbers that result from commercial fishing, additions of young to the stock, hydrographic conditions and other factors.

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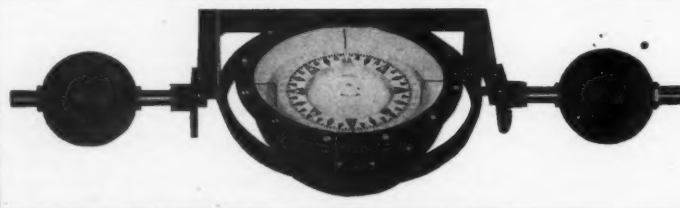
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Dragger *Lindy*, 50' x 15' x 6', D13000 Caterpillar, ship-to-shore radio, 25-watt, 2 sets doors, 6 nets, 2 sets dredges, dory, pilothouse aft. Now scalloping. Price—\$17,000. George D. Olson, E. Washington St., Toms River, N. J.



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AUGUST, 1949



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